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**INLAND EMPIRE ENVIRONMENTAL SERVICES**  
7291 ASHLEY AVENUE  
COLTON, CALIFORNIA 92324  
(714) 872-0501 (714) 824-1442

EGS C794-0020  
103.0096

SAN GABRIEL VALLEY  
15050

**RESULTS OF THE SECOND PHASE OF  
A SOIL GAS SURVEY  
CONDUCTED AT THE  
CROWN CITY PLATING COMPANY  
4350 TEMPLE CITY BLVD.  
EL MONTE, CALIFORNIA**

**PREPARED FOR**

**Mr. Lawrence P. Donovan III  
CROWN CITY PLATING COMPANY  
4350 Temple City Blvd.  
El Monte, California 91731**

44-1438 pg 1 of 5  
Los Angeles Region  
California Regional Water Quality Control Board

**SUBMITTED TO :**

California Regional Water Quality  
Control Board - Los Angeles Region  
101 Centre Plaza Drive  
Monterey Park, California 91754-2156  
Attn: Phil Chandler

**PREPARED BY :**

**INLAND EMPIRE ENVIRONMENTAL SERVICES  
7291 Ashley Ave.  
Colton, Ca. 92324**

September 6, 1993

## **TABLE OF CONTENTS**

	<b>Page</b>
<b>INTRODUCTION</b> -----	1
<b>FIELD PROCEDURES</b> -----	2
<b>RESULTS</b> -----	4
<b>FIGURE 1 - INDEX MAP</b>	1
<b>FIGURE 2 - PLOT PLAN</b>	2

**APPENDIX A - CONTOUR MAPS AND TABLE OF RESULTS**

**APPENDIX B - HALL DETECTOR CHROMATOGRAMS**

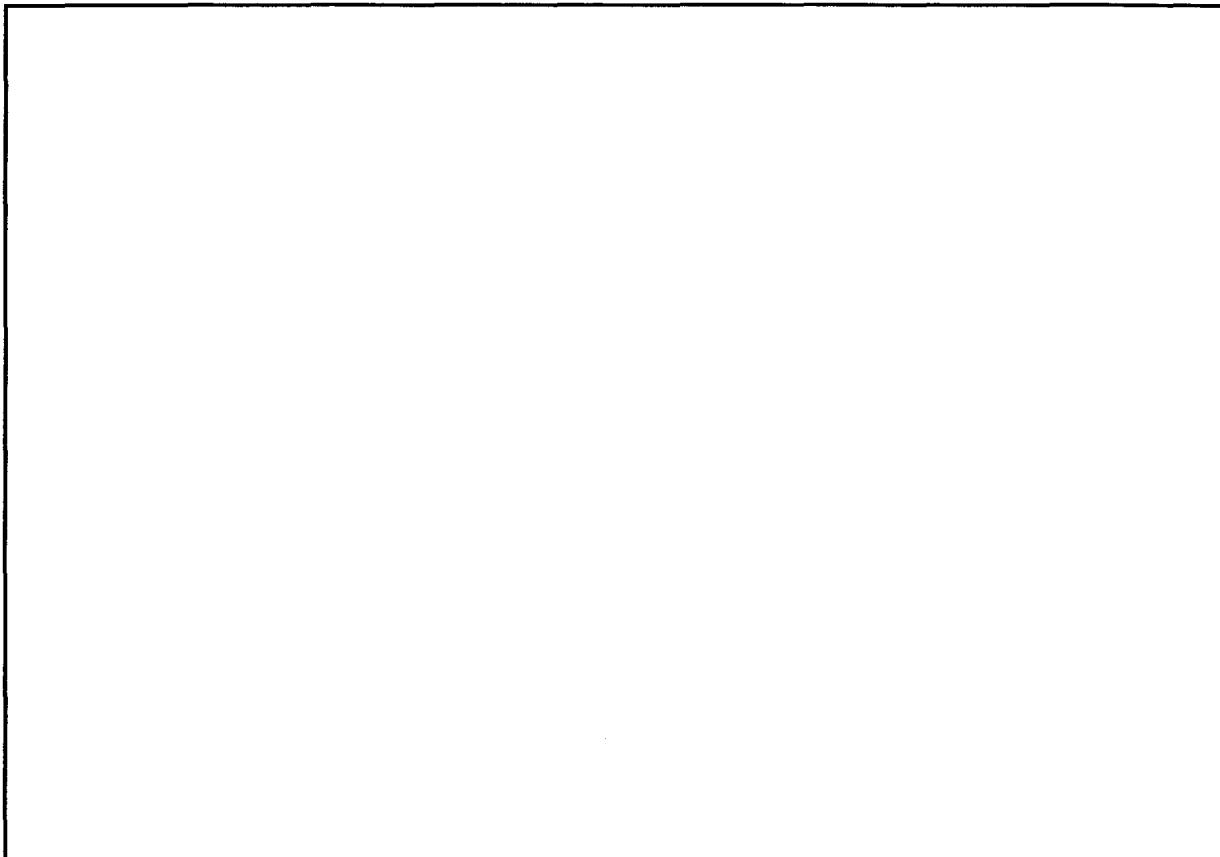
**APPENDIX C - PID DETECTOR CHROMATOGRAMS**

**APPENDIX D - PRE-SURVEY CALIBRATIONS AND DAILY CHECKS  
AND QUALITY CONTROL**

## **INTRODUCTION**

**INLAND EMPIRE ENVIRONMENTAL SERVICES**  
7291 Ashley Avenue  
Colton, California 92324  
(714) 872-0501 FAX (714) 824-1442

We are pleased to present the results this first phase of a Soil Gas Survey which was conducted for Crown City Plating located at 4350 Temple City Boulevard, El Monte, California (see Figure #1 INDEX MAP). The study commenced upon approval of Ms. Rosario Aston of the California Regional Water Quality Control Board and was conducted in real time on the site.



**Figure 1 - INDEX MAP**

The survey was carried out by Inland Empire Environmental Services between August 4 and 5, 1993. Vapor samples were obtained from fifteen (15) points on the property ( see Figure 2 - Plot Plan ).

## **FIELD PROCEDURES**

**INLAND EMPIRE ENVIRONMENTAL SERVICES**  
7291 ASHLEY AVENUE  
COLTON, CALIFORNIA 92324  
(714) 872-0501 FAX (714) 824-1442

This soil gas survey collected and analyzed organic vapors of the subsurface in real time. This survey was conducted using an SRI portable gas chromatograph which detected and characterized these vapors to a field sensitivity as low as 1 part per billion (ppb). The SRI gas chromatograph was equipped with two types of detectors. The first was a PHOTO IONIZATION DETECTOR (PID) and the second was an ELECTRO-LYTIC CONDUCTIVITY DETECTOR (ELCD) or more commonly known as a Hall Detector. The PID is sensitive to products such as benzene while the ELCD is extremely sensitive to chlorinated hydrocarbons. Because the primary compounds of interest in this survey were chlorinated hydrocarbons, the results from the ELCD are of greatest concern to us.

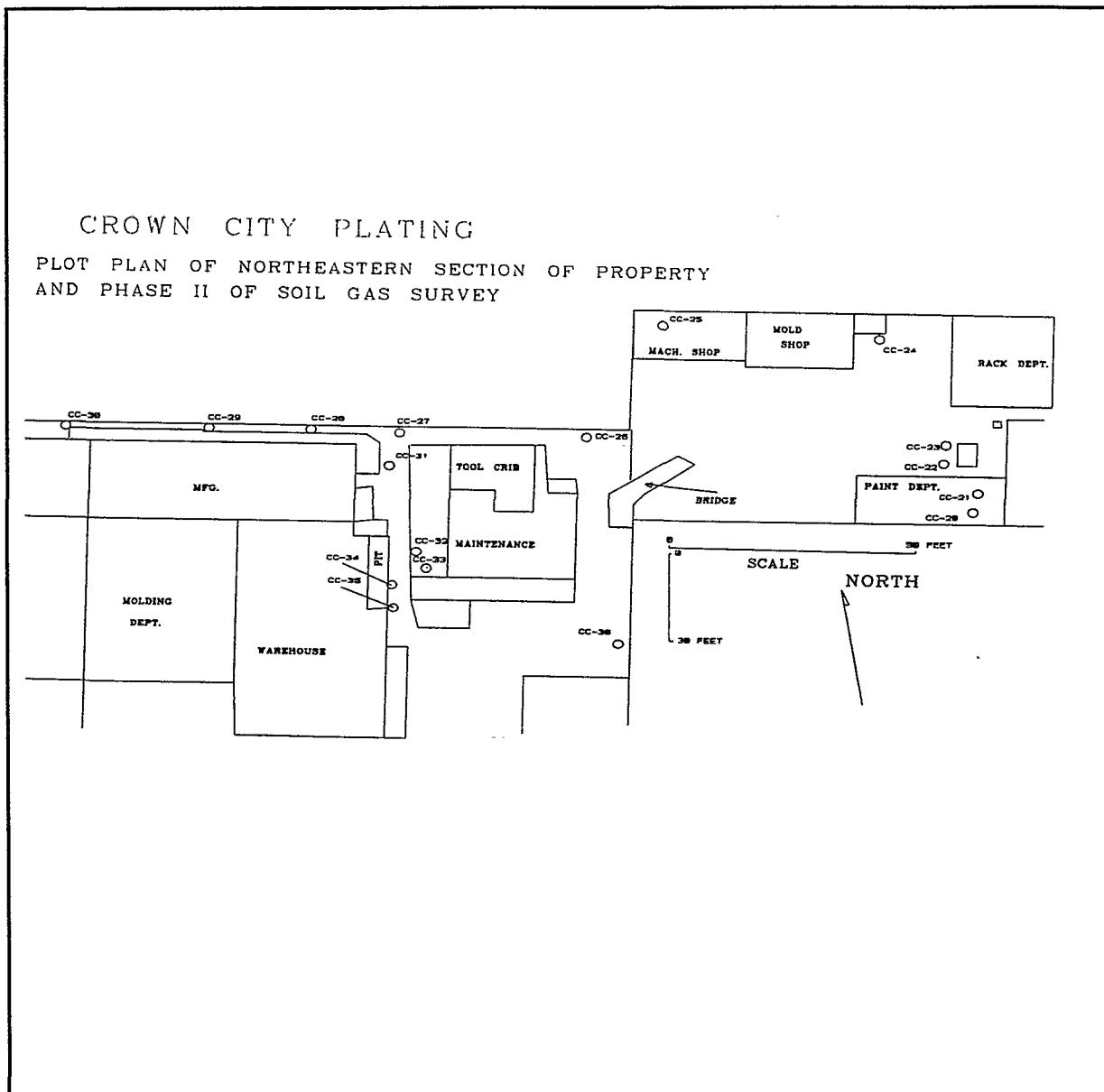


Figure 2 - PLOT PLAN

The SRI gas chromatograph was calibrated using a three point curve of 3 $\mu$ g/L, 10 $\mu$ g/L, and 50 $\mu$ g/L of a mixture of compounds used for EPA method 8010/8020. Daily

checks consisted of an injection of 10 $\mu$ g/L of the same compounds used for the construction of the calibration curve. Quality checks were made at the beginning and end of each survey day using an 8010/8020 mixture supplied by a different laboratory. The vapor samples were prepared in VOC bottles with new septums which were placed in an aluminum block that is surrounded by salt. This assemblage is heated inside a close air circulated oven at 100 °C for one hour. A hamilton gas tight syringe is then used to inject 10cc of this vapor onto the Tenax trap which has been chilled to 0 °C.

The capillary columns used during the survey were a 75 meter megabore supplied by J&W Scientific. The primary column is a DB-624 with a .53 mm inside diameter and is used with the PID/ELCD detectors. The second column is a DB-VRX with a .45 mm inside diameter and is used with the PID/FID detectors. The carrier gas was laboratory grade hydrogen. Filtered air was used to pressurize the n-Propanol which was used as the non-conductive background for the Hall detector. The temperature of the column is controlled by the Peak III software which, in this case, is designed to hold the temperature at 40 °C for five (5) minutes and then to ramp to 160 a 5 °C per minute.

The system used to extract vapor samples from the subsurface consists of a vapor probe which is connected to a pump by a teflon tube. Vapors are drawn from the subsurface through the teflon tubing to the pump. As the vapors are drawn to the pump, they pass through a glass sampling bulb which contains a sampling port with a septum. The pump is allowed to run for 10 seconds and a sample is obtained from the vapor stream using a Hamilton gas tight syringe. Since the pump is downstream from the sampling port, no cross contamination of samples from the pump is possible.

The vacuum pump used to extract the soil vapor samples is an Air Cadet Vacuum/Pressure Station sold by Cole-Palmer Instrument Company. This instrument pumps at a rate of 1050 cubic inches per minute at 15" Hg and 110 volts. The standard purge time for the survey was 10 seconds which calculates to a volume of 2.87 Liters. The total volume of the system is 700 ml or .7 Liters, which includes the glass gas sampling bulb, hydro-purge cylinder, Teflon tubing and sample probe. Therefore, the system is purged approximately four (4) times before a sample of vapors is taken.

The soil probes used were constructed out of 1/2 inch iron pipe. The pipe is driven five feet below the ground surface with an impact hammer. Once the probe has been installed it is jacked back out approximately 1 inch. This allows the removable tip to be punched out with a metal rod. The probe is then connected with Teflon tubing to the vacuum pump. The seal between the outside probe pipe and the annulus of the bore hole insures that ambient air from the surface is not drawn into the sample vacuum pump.

Where required, bore holes were drilled through the surfacing material with a three-quarter inch diameter impact drill. A manually operated impact hammer was then used to create the seven-sixteenth inch (7/16") diameter holes to a depth of four feet below ground surface. The probe system was then driven into undisturbed soil and a vapor sample was collected using a sampling pump as described above.

The vapor sample at 10 cc was then injected into the chromatographic column. The individual components present in the soil gas were separated as they were drawn through

the column by the carrier gas. As each component (or group of components) exited the column and passed through the detectors, an electronic signal proportional to the amount of material was generated which produced a plot of the detector response versus time. These chromatograms of the soil gas samples are included as Appendix A and B at the end of this report.

## RESULTS

Three identifiable chlorinated compounds were detected during this second phase of the survey. The highest concentrations of these compounds were detected within the paint department, adjacent to the chemical storage facility located north of the paint department, and near a storm drain southwest of the maintenance building.

Map #1 is a contour map of Tetrachlorethane ( PCE ). The highest concentrations are located adjacent to the chemical storage building, soil gas points cc-22 and cc-23. PCE was also detected at soil gas survey points cc-20, cc-21, cc-24, cc-25, cc-23, cc-28, and cc-34.

Map #2 is a contour map of 1,1,1-Trichloroethane. This particular compound is concentrated around the paint department and the chemical storage building at soil gas points cc-20, cc-21, cc-22, and cc-23. TCA was also noted at survey points cc-26, cc-28, and cc-34.

Map #3 is a contour map of Trichloroethene. This compound was detected around the paint department at survey points cc-20, cc-21, cc-22 and cc-23. TCE was also noted at survey points cc-27 and cc-34.



Lawrence P. Pearce  
Project Manager  
IEES  
CPG #3873  
REA #2580

INLAND EMPIRE ENVIRONMENTAL SERVICES

7291 ASHLEY AVENUE  
COLTON, CALIFORNIA 92324  
(714) 872-0501 FAX (714) 824-1442

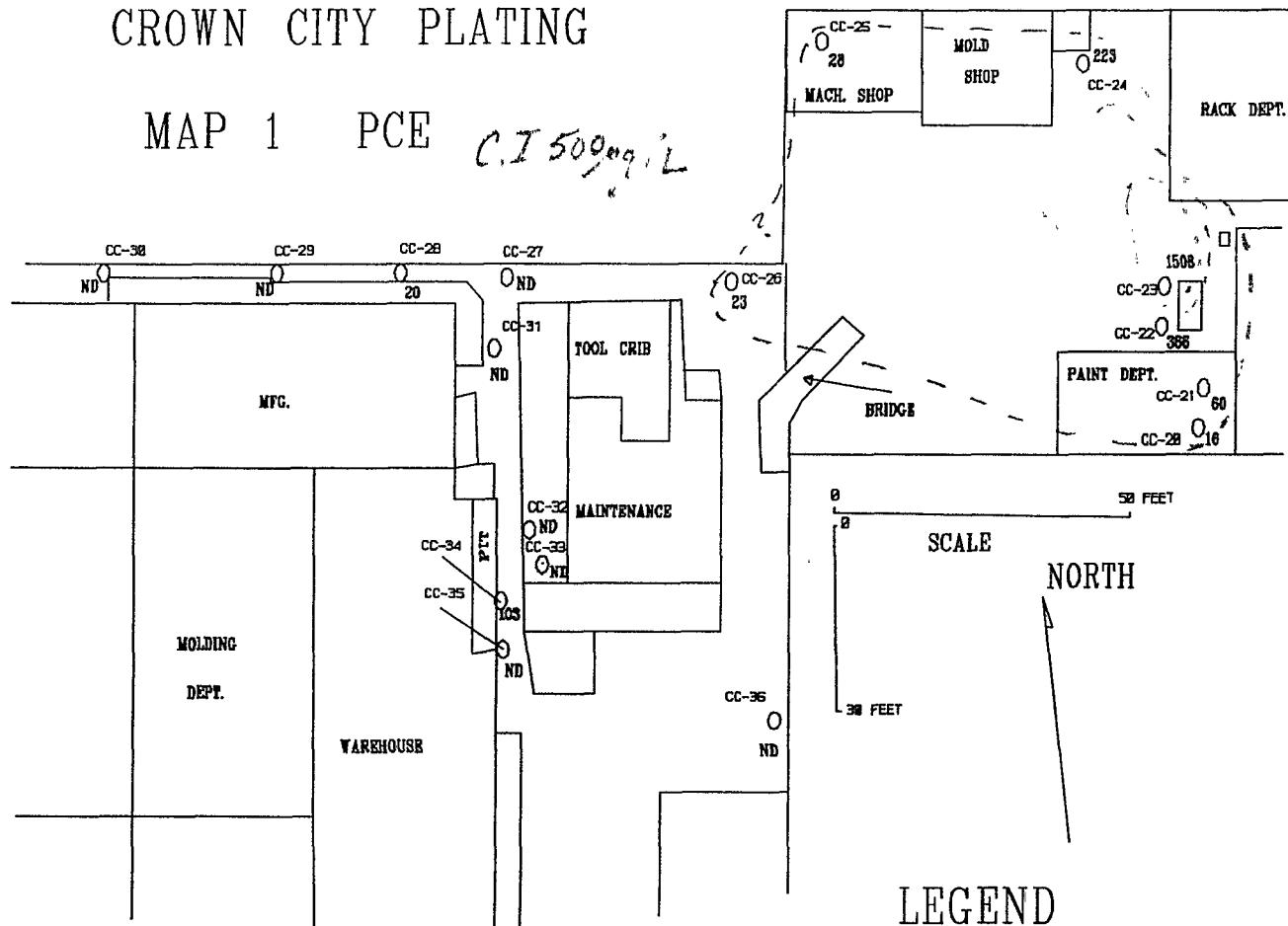
**APPENDIX A  
CONTOUR MAPS AND RESULTS OF ANALYSIS**

**INLAND EMPIRE ENVIRONMENTAL SERVICES  
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(714) 872-0501 FAX (714) 824-1442**

## CROWN CITY PLATING

MAP 1 PCE

C.I 500<sub>aq.</sub>, L



## LEGEND

**SOIL GAS SURVEY POINT NUMBER**

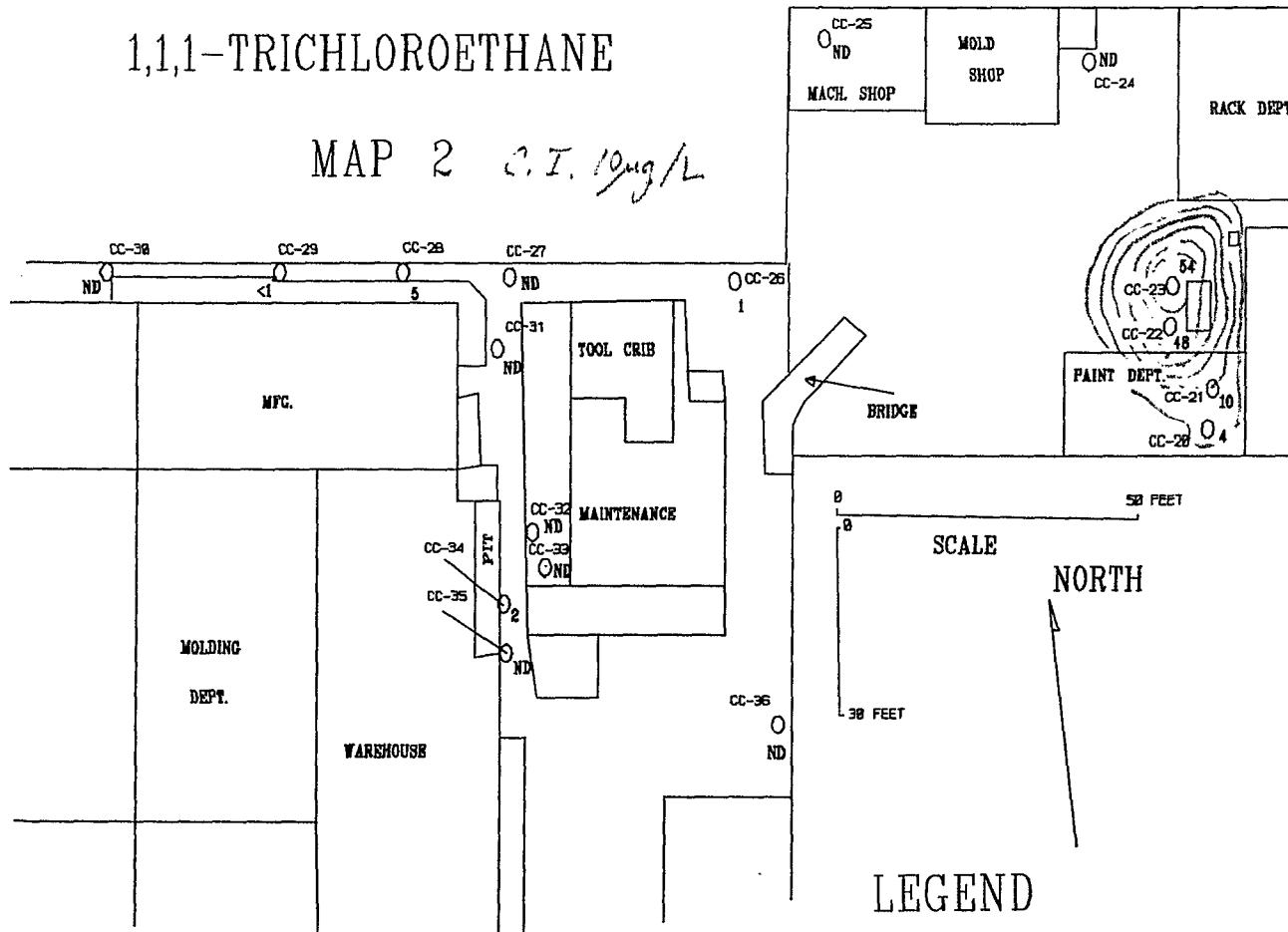
CC-21  
100

130 COMPONENT VALUE OR CONCENTRATION  
IN MICROGRAMS PER LITER

# CROWN CITY PLATING

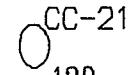
1,1,1-TRICHLOROETHANE

MAP 2 C.I. 10ug/L



## LEGEND

SOIL GAS SURVEY POINT NUMBER

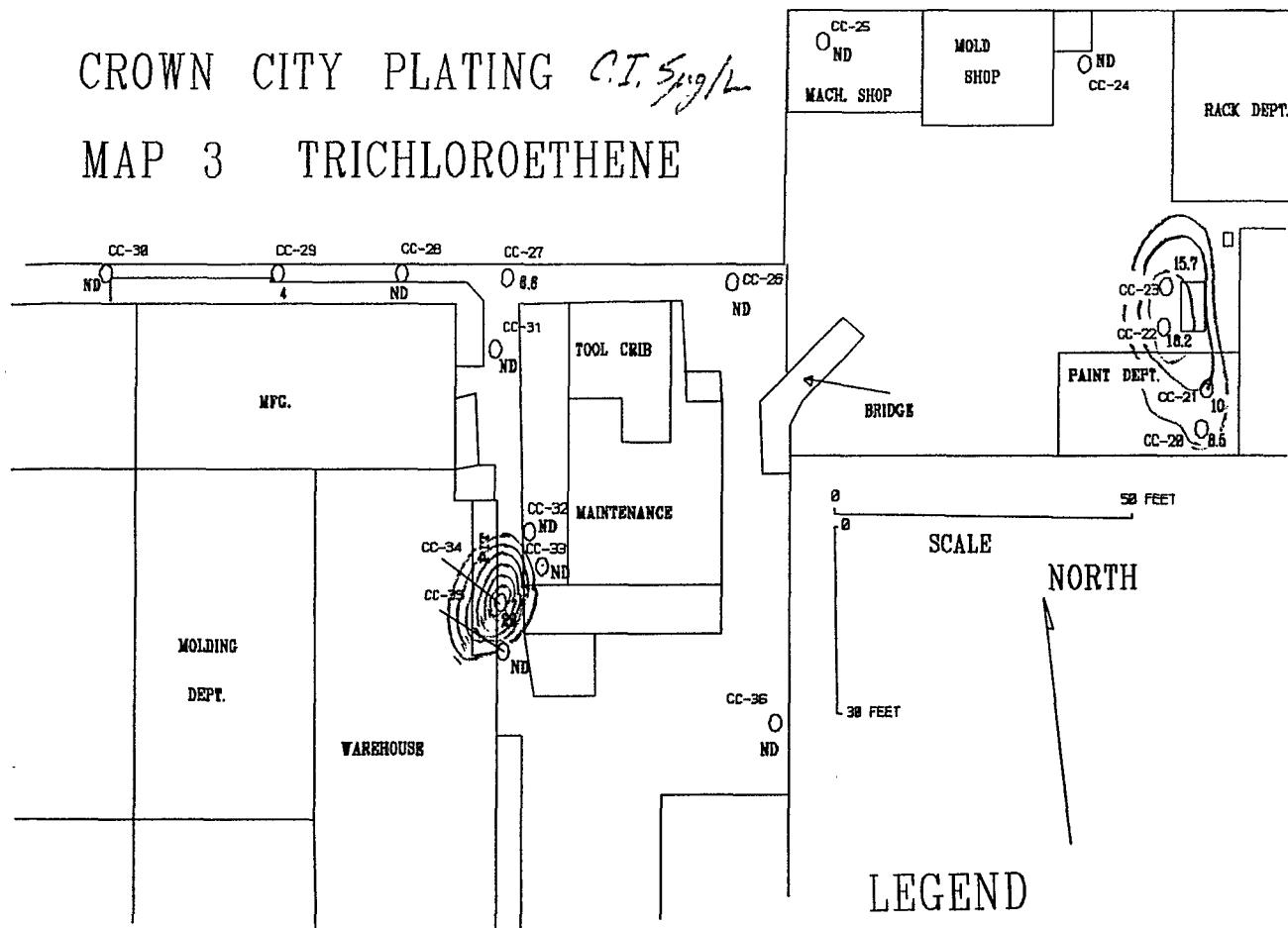


130 COMPONENT VALUE OR CONCENTRATION

IN MICROGRAMS PER LITER

CROWN CITY PLATING C.I. 5/9/L

### MAP 3 TRICHLOROETHENE



## LEGEND

SOIL GAS SURVEY POINT NUMBER

CC-21  
128

130 COMPONENT VALUE OR CONCENTRATION  
IN MICROGRAMS PER LITER

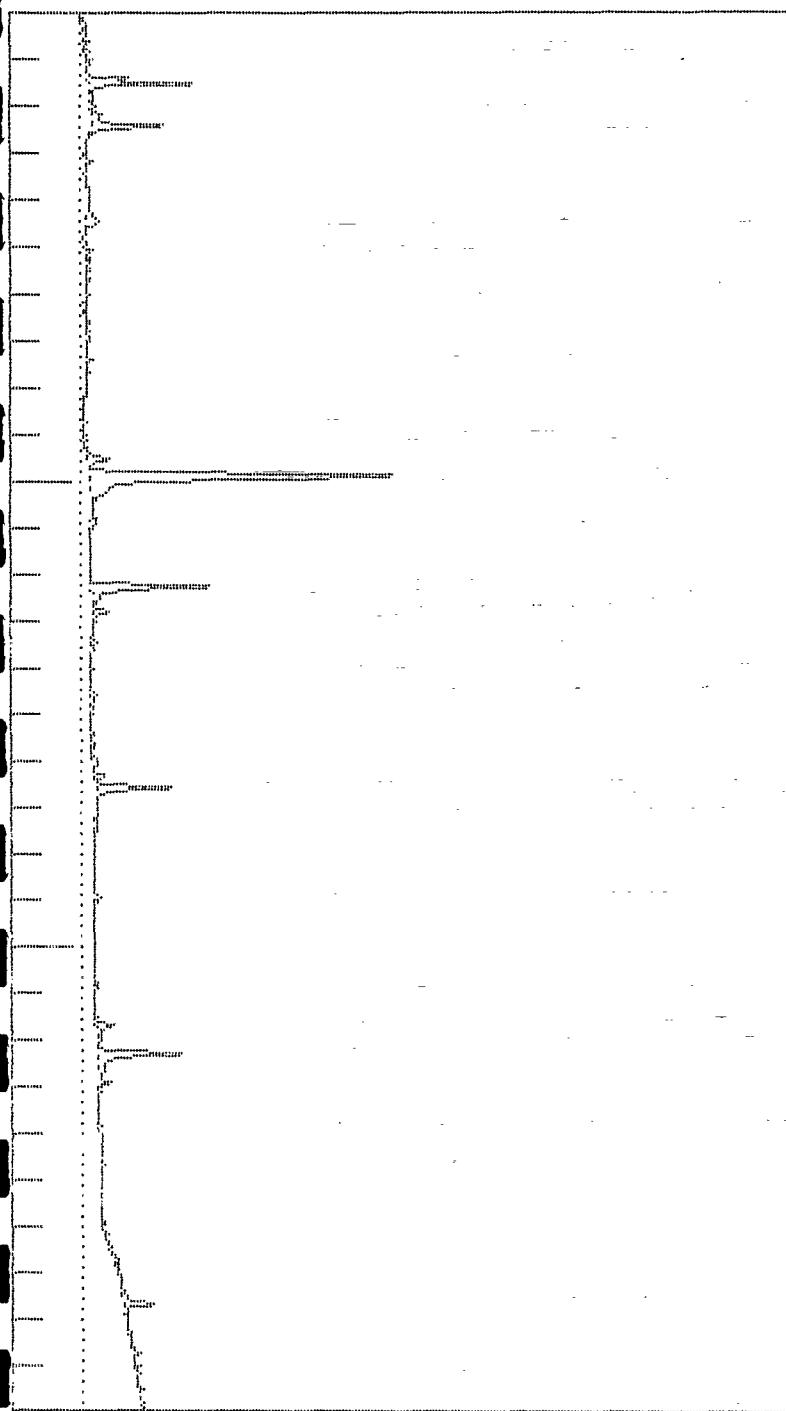
**APPENDIX B  
HALL DETECTOR CHROMATOGRAMS**

**INLAND EMPIRE ENVIRONMENTAL SERVICES  
7291 ASHLEY AVENUE  
COLTON, CALIFORNIA 92324  
(714) 872-0501 FAX (714) 824-1442**

Lab name : IEES  
 Client : CROWN CITY PLATING  
 Column : J&W DB-624 75 m  
 Carrier : HYDROGEN  
 Temp. prog : SOL10.TEM  
 Events : PURGE3.EVT  
 Components : C2815H.CPT  
 Integration : Peak sens=95.0 Base sens=30.0 Min area= 10.00 Dilution= 1.00  
 O Tangents=off  
 Data file : cch20.chr ()  
 Operator : PEARCE

-3.200mV

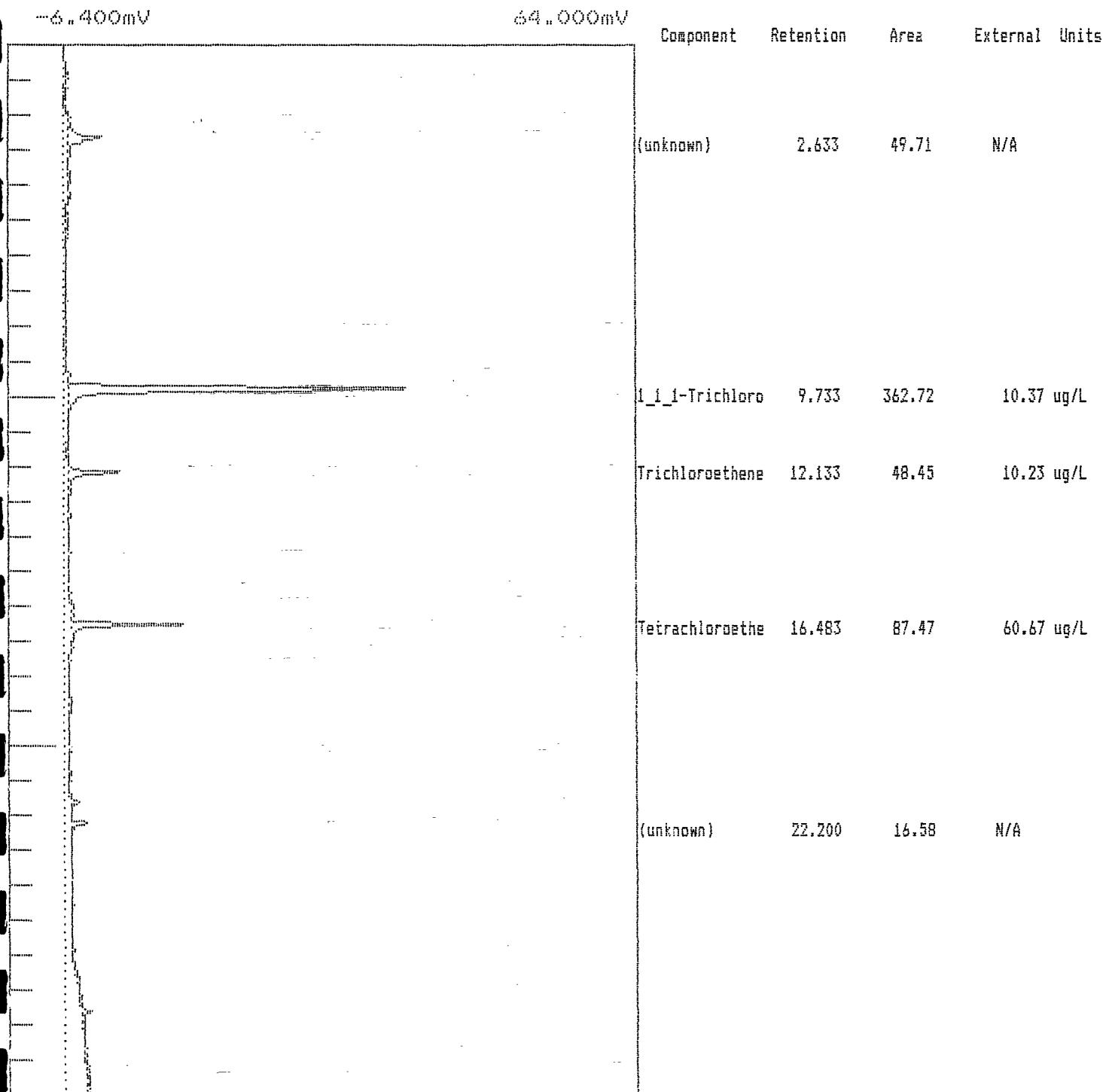
32.000mV



Component	Number	Retention	Area	External	Units
(unknown)	0	1.500	26.50	N/A	
(unknown)	0	2.416	35.55	N/A	
1,1,1-Trichloroethane	12	9.850	142.81	2.12	ug/L
Trichloroethylene	15	12.216	40.65	6.98	ug/L
Tetrachloroethylene	22	16.550	22.82	1.84	ug/L
(unknown)	0	22.266	32.26	N/A	
(unknown)	0	27.650	12.27	N/A	

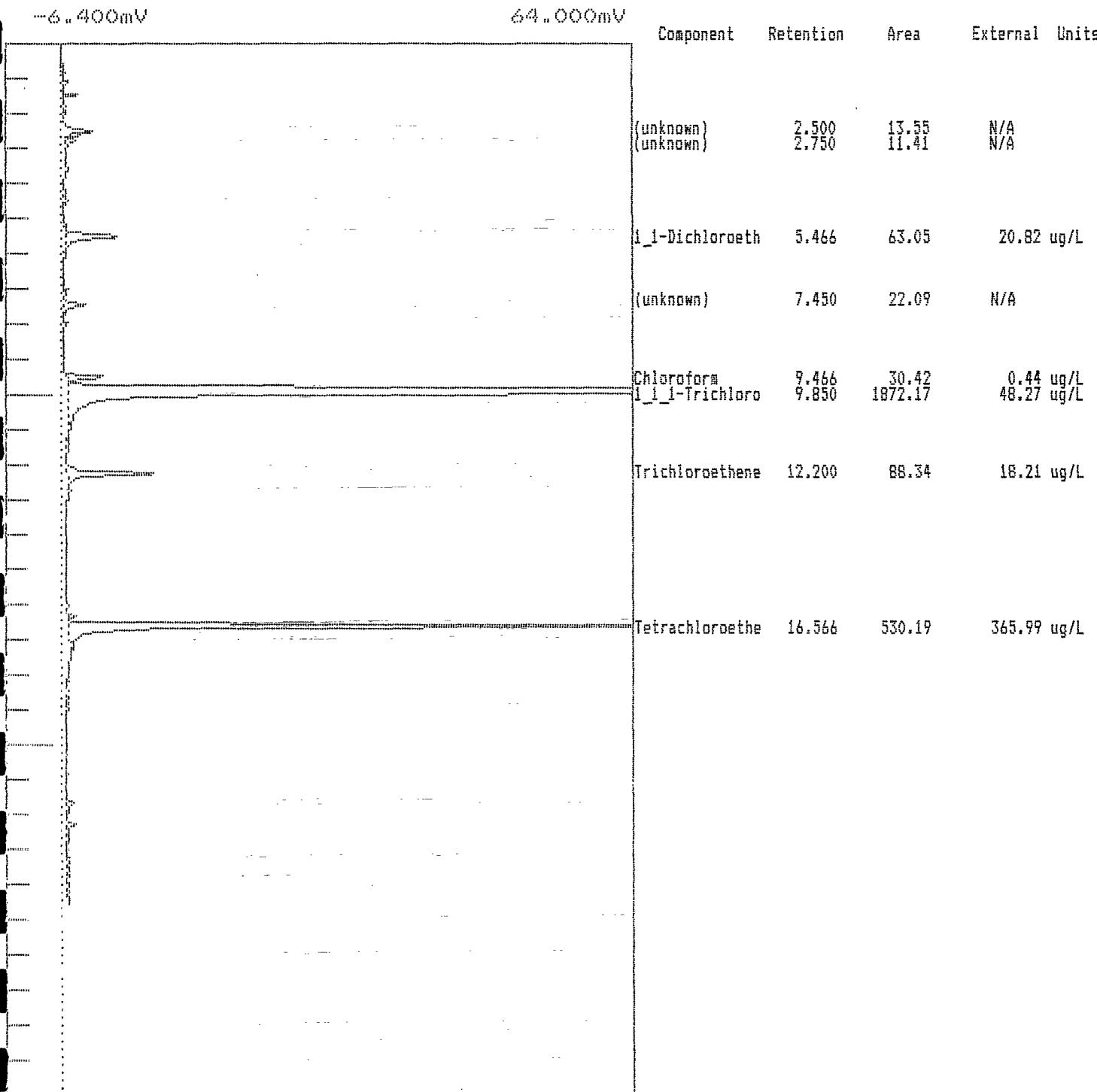
Component	Number	Retention	Area	External	Internal
1,1,1-Trichloroethane	12	9.850	142.81	2.12	2.1202
Trichloroethylene	15	12.216	40.65	6.98	6.9802
Tetrachloroethylene (PCE)	22	16.550	22.82	1.84	1.8403

Lab name : IEES  
 Client : CROWN CITY PLATING  
 Column : J&W DB-624 75 m  
 Carrier : HYDROGEN  
 Temp. prog : SOL10.TEM  
 Events : PURGE.EVT  
 Components : C2815H.CPT  
 Integration : Peak sens=95.0 Base sens=30.0 Min area= 10.00 Dilution= 1.00  
 Tangents=off  
 Data file : CCH21.CHR ()  
 Operator : PEARCE



Component	Retention	Area	External	Internal	Units
1,1,1-Trichloroethane	9.733	362.72	10.37	10.3721	ug/L
Trichloroethylene	12.133	48.45	10.23	10.2311	ug/L
Tetrachloroethylene (PCE)	16.483	87.47	60.67	60.6655	ug/L

Lab name : IEES  
 Client : CROWN CITY PLATING  
 Column : J&W DB-624 75 m  
 Carrier : HYDROGEN  
 Temp. prog : SOL10.TEM  
 Events : PURGE.EVT  
 Components : C2815H.CPT  
 Integration : Peak sens=95.0 Base sens=30.0 Min area= 10.00 Dilution= 1.00  
 Tangents=off  
 Data file : CCH22.CHR ()  
 Operator : PEARCE



Component	Retention	Area	External	Internal	Units
1,1-Dichloroethene	5.466	63.05	20.82	20.8213	ug/L
Chloroform	9.466	30.42	0.44	0.4400	ug/L
1,1,1-Trichloroethane	9.850	1872.17	48.27	48.2670	ug/L
Trichloroethene	12.200	88.34	18.21	18.2121	ug/L
Tetrachloroethene (PCE)	16.566	530.19	365.99	365.9931	ug/L

Lab name : IEES  
 Client : CROWN CITY PLATING  
 Column : J&W DB-624 75 m  
 Carrier : HYDROGEN  
 Temp. prog : SOL10.TEM  
 Events : PURGE3.EVT  
 Components : C2815H.CPT  
 Integration : Peak sens=95.0 Base sens=30.0 Min area= 10.00 Dilution= 1.00  
 Tangents=off  
 Data file : CCH23.CHR ()  
 Operator : PEARCE

-6..400mV

64..000mV

Component Retention Area External Units

(unknown)	2.350	29.98	N/A
1,1-Dichloroeth	5.300	110.77	36.98 ug/L
(unknown)	7.466	19.06	N/A
1,1,1-Trichloro	9.500	47.62	N/A
1,1,1-Trichloroethane	9.883	2109.20	54.22 ug/L
Trichloroethene	12.233	75.73	15.69 ug/L
Tetrachloroethe	16.550	2186.78	1508.47 ug/L
(unknown)	22.216	10.14	N/A
(unknown)	26.916	12.84	N/A

Component Retention Area External Internal Units

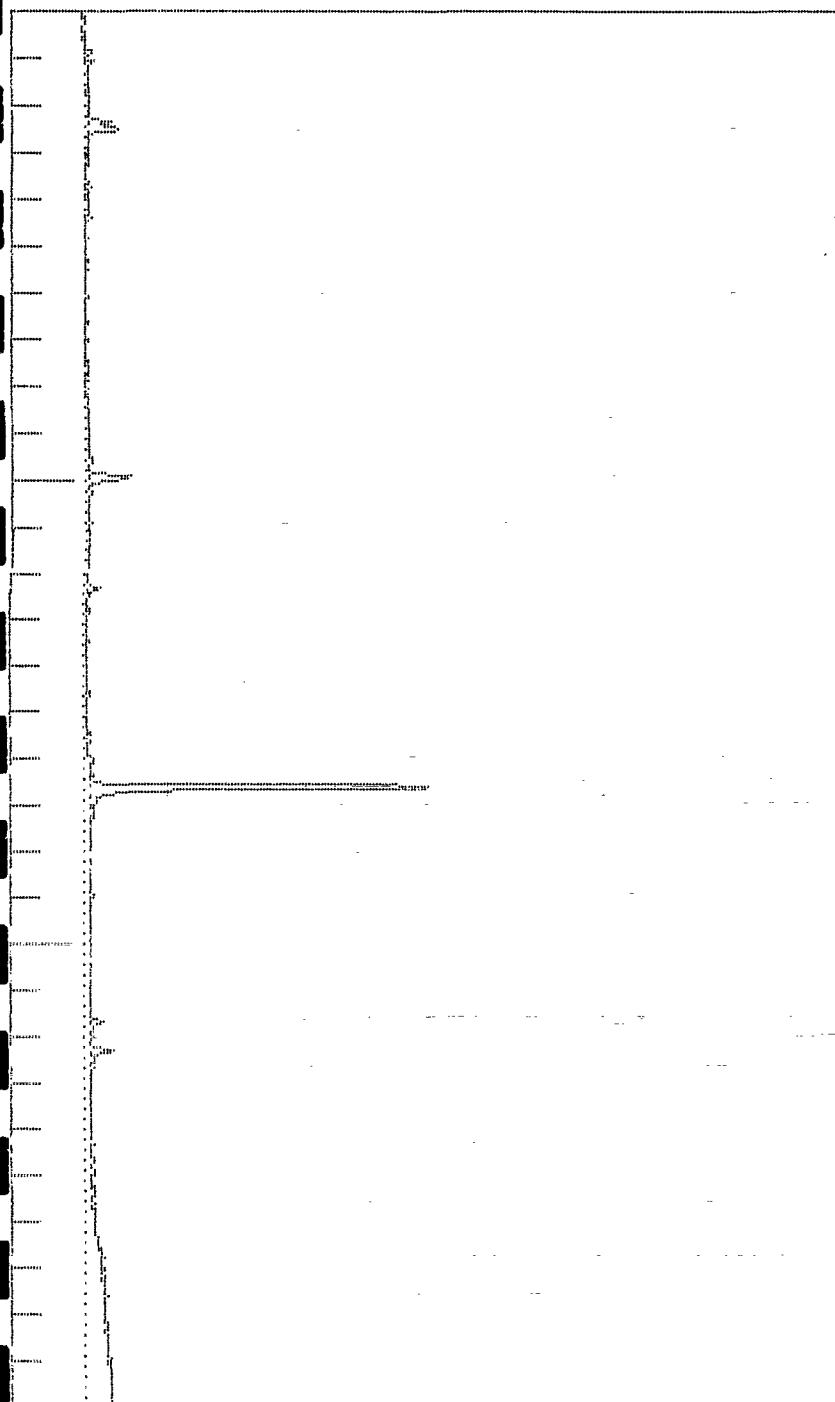
1,1-Dichloroethene	5.300	110.77	36.98	36.9839	ug/L
1,1,1-Trichloroethane	9.883	2109.20	54.22	54.2177	ug/L
Trichloroethene	12.233	75.73	15.69	15.6888	ug/L
Tetrachloroethene (PCE)	16.550	2186.78	1508.47	1508.4690	ug/L

Lab name : IEES  
 Client : CROWN CITY PLATING  
 Column : J&W DB-624 75 m  
 Carrier : HYDROGEN  
 Temp. prog : SOL10.TEM  
 Events : PURGE.EVT  
 Components : C2815H.CPT  
 Integration : Peak sens=95.0 Base sens=30.0 Min area= 10.00 Dilution= 1.00  
 Tangents=off  
 Data file : CCH24.CHR ()  
 Operator : PEARCE

-6.400mV

64.000mV

Component	Retention	Area	External	Units
(unknown)	2.483	35.28	N/A	
(unknown)	9.900	30.90	N/A	
Tetrachloroethene	16.583	222.87	154.05	ug/L
(unknown)	21.666	10.13	N/A	
(unknown)	22.266	14.96	N/A	

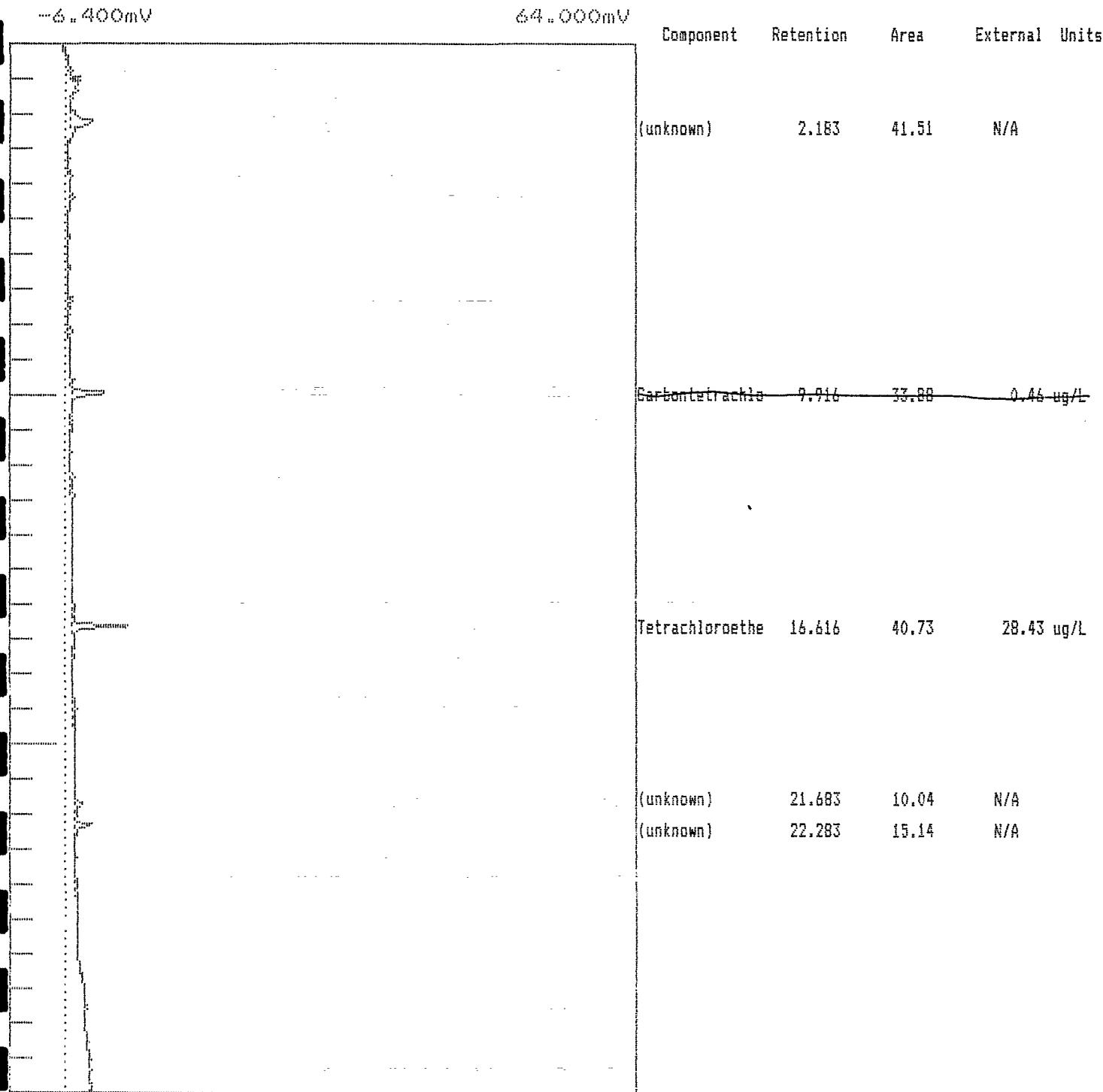


Component	Retention	Area	External	Internal	Units
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Tetrachloroethene (PCE)	16.583	222.87	154.05	154.0483	ug/L
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1	222.87	154.05	154.0483	
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Lab name : IEES  
 Client : CROWN CITY PLATING  
 Column : J&W DB-624 75 m  
 Carrier : HYDROGEN  
 Temp. prog : SOL10.TEM  
 Events : PURGE.EVT  
 Components : C2815H.CPT  
 Integration : Peak sens=95.0 Base sens=30.0 Min area= 10.00 Dilution= 1.00  
 O Tangents=off  
 Data file : CCH25.CHR ()  
 Operator : PEARCE

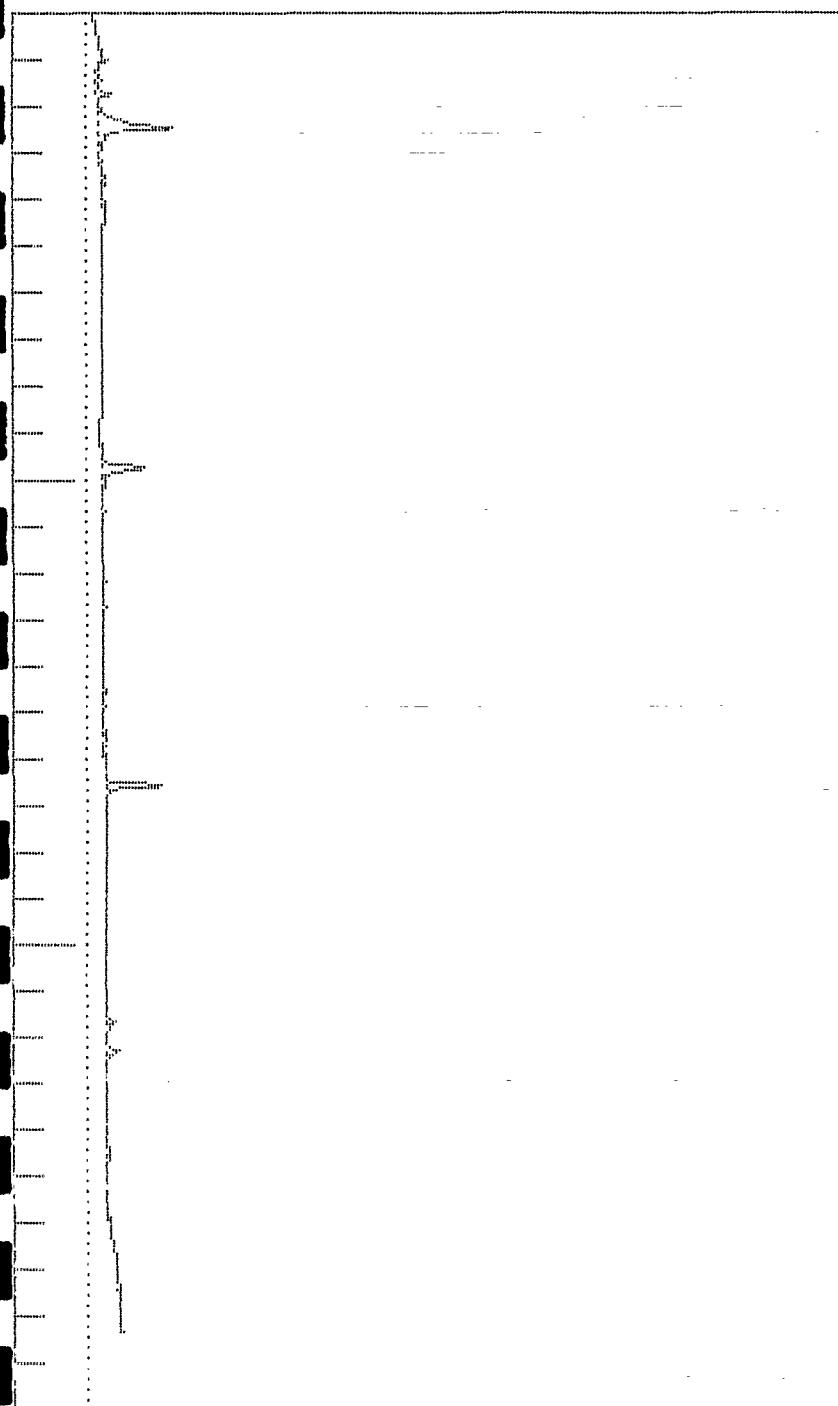


Component	Retention	Area	External	Internal	Units
Carbon tetrachloride	9.916	33.88	0.46	0.4637	ug/L
Tetrachloroethene (PCE)	16.616	40.73	28.43	28.4345	ug/L

Lab name : IEES  
 Client : CROWN CITY PLATING  
 Column : J&W DB-624 75 m  
 Carrier : HYDROGEN  
 Temp. prog : SOL10.TEM  
 Events : PURGE.EVT  
 Components : C2815H.CPT  
 Integration : Peak sens=95.0 Base sens=30.0 Min area= 10.00 Dilution= 1.00  
 O Tangents=off  
 Data file : CCH26.CHR ()  
 Operator : PEARCE

-6..400mV

64..000mV



Component	Retention	Area	External	Units
-----------	-----------	------	----------	-------

(unknown)	2.416	88.87	N/A
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1,1,1-Trichloro	9.716	38.54	1.16 ug/L
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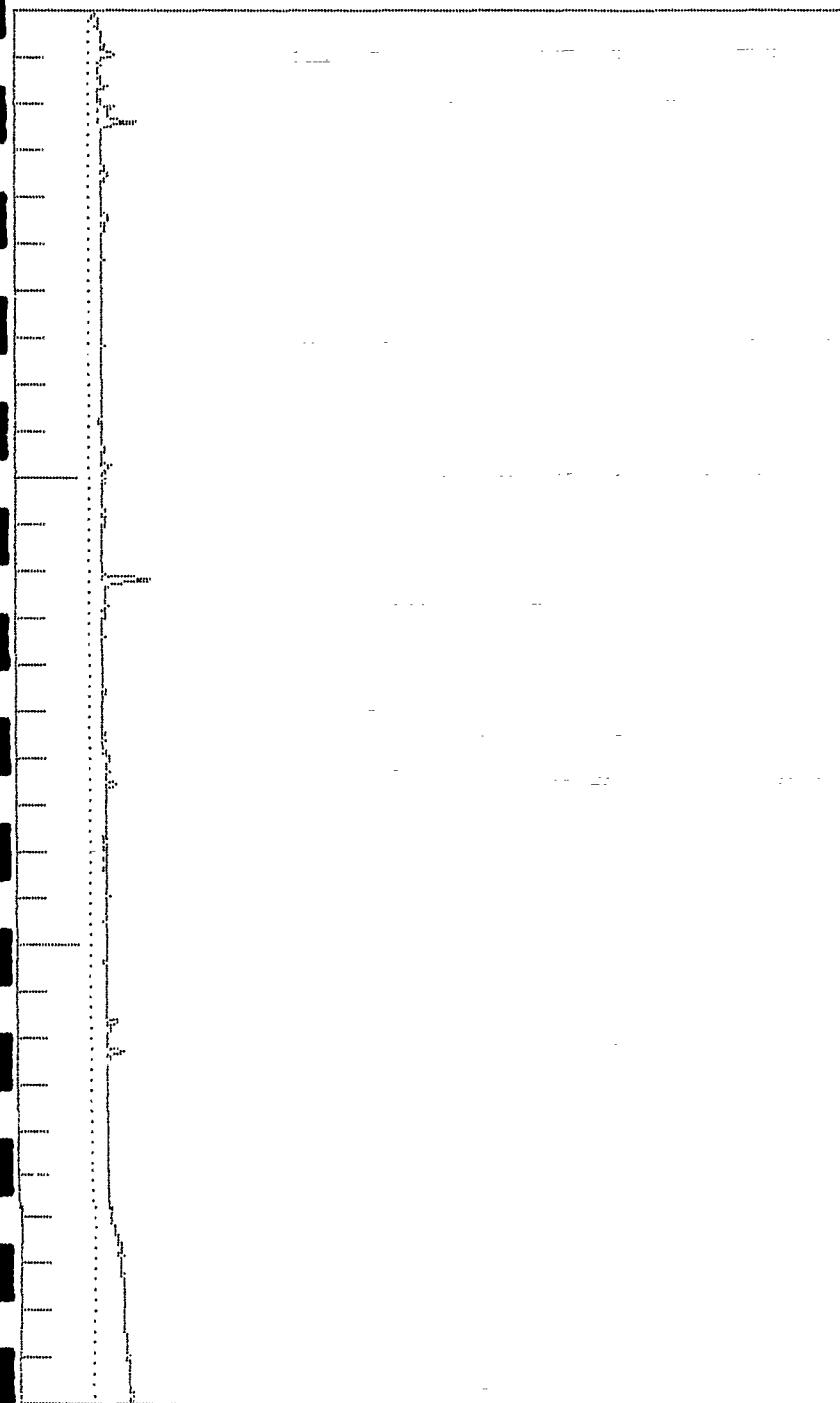
Tetrachloroethene	16.533	32.95	23.07 ug/L
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Component	Retention	Area	External	Internal	Units
1,1,1-Trichloroethane	9.716	38.54	1.16	1.1644	ug/L
Tetrachloroethene (PCE)	16.533	32.95	23.07	23.0690	ug/L

Lab name : IEES  
 Client : CROWN CITY PLATING  
 Column : J&W DB-624 75 m  
 Carrier : HYDROGEN  
 Temp. prog : SOL10.TEM  
 Events : PURGE.EVT  
 Components : C2815H.CPT  
 Integration : Peak sens=95.0 Base sens=30.0 Min area= 10.00 Dilution= 1.00  
 Tangents=off  
 Data file : CCH27.CHR ()  
 Operator : PEARCE

-6..400mV

64..000mV



Component	Retention	Area	External	Units
-----------	-----------	------	----------	-------

(unknown)	2.366	56.37	N/A
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Trichloroethene	12.150	32.67	6.83 ug/L
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(unknown)	21.633	10.01	N/A
-----------	--------	-------	-----

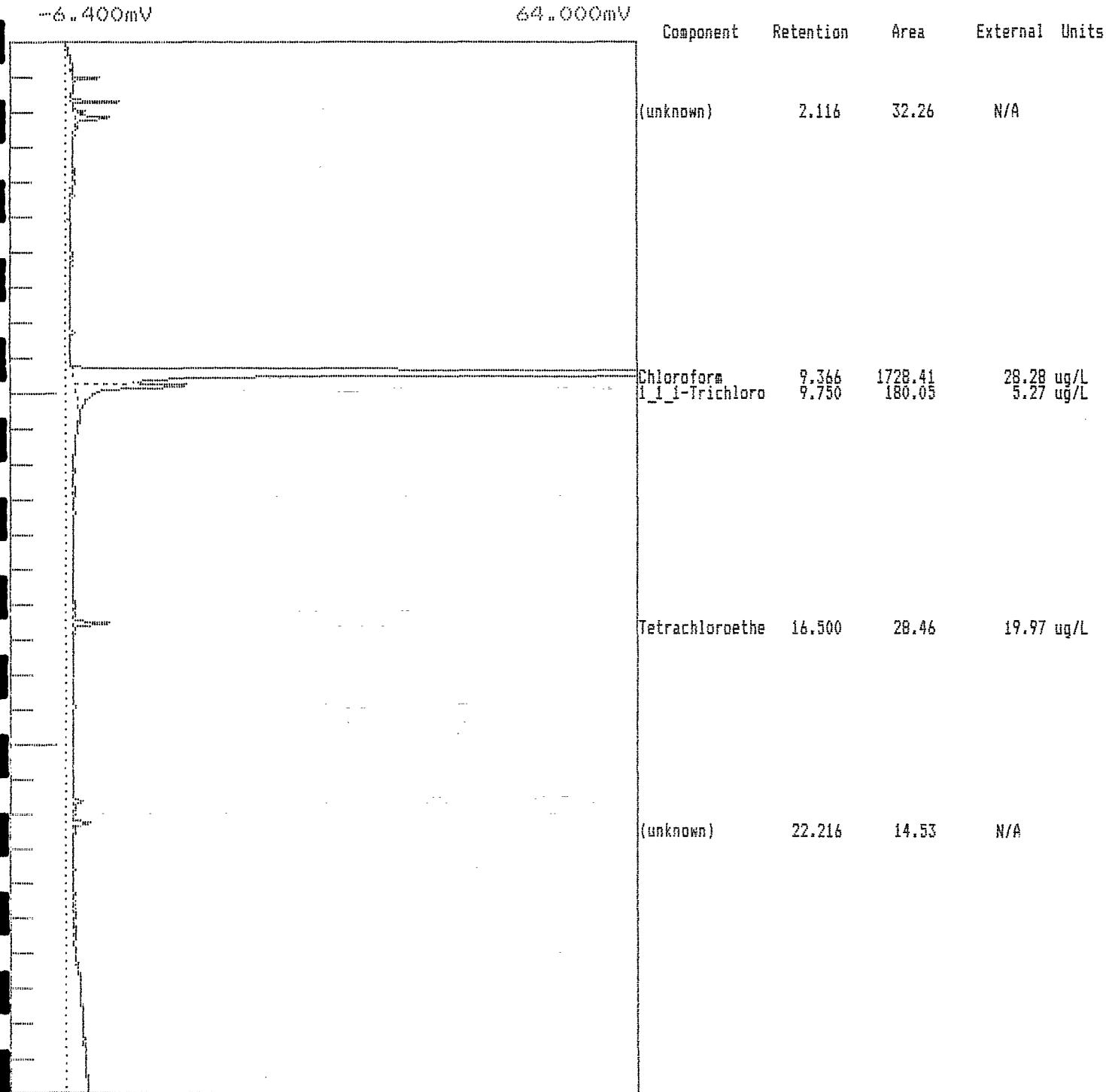
(unknown)	22.266	12.36	N/A
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(unknown)	26.816	10.34	N/A
-----------	--------	-------	-----

Component	Retention	Area	External	Internal	Units
-----------	-----------	------	----------	----------	-------

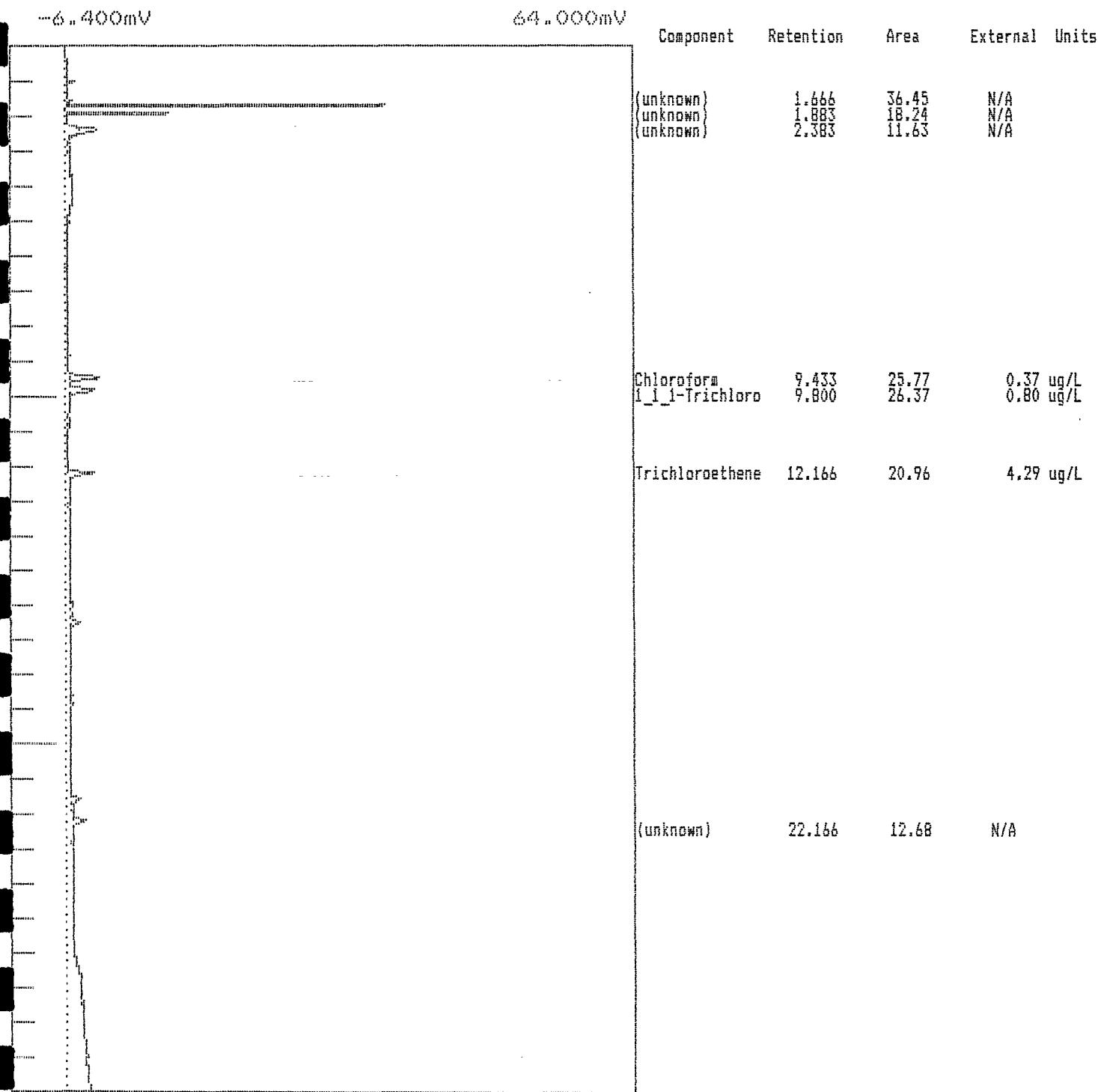
Trichloroethene	12.150	32.67	6.83	6.8294	ug/L
-----------------	--------	-------	------	--------	------

Lab name : IEES  
 Client : CROWN CITY PLATING  
 Column : J&W DB-624 75 m  
 Carrier : HYDROGEN  
 Temp. prog : SOL10.TEM  
 Events : PURGE.EVT  
 Components : C2815H.CPT  
 Integration : Peak sens=95.0 Base sens=30.0 Min area= 10.00 Dilution= 1.00  
 Tangents=off  
 Data file : CCH28.CHR ()  
 Operator : PEARCE



Component	Retention	Area	External	Internal	Units
Chloroform	9.366	1728.41	28.28	28.2756	ug/L
1,1,1-Trichloroethane	9.750	180.05	5.27	5.2737	ug/L
Tetrachloroethene (PCE)	16.500	28.46	19.97	19.9724	ug/L

Lab name : IEES  
 Client : CROWN CITY PLATING  
 Column : J&W DB-624 75 m  
 Carrier : HYDROGEN  
 Temp. prog : SOL10.TEM  
 Events : PURGE.EVT  
 Components : C2B15H.CPT  
 Integration : Peak sens=95.0 Base sens=30.0 Min area= 10.00 Dilution= 1.00  
 Tangents=off  
 Data file : CCH29.CHR ()  
 Operator : PEARCE



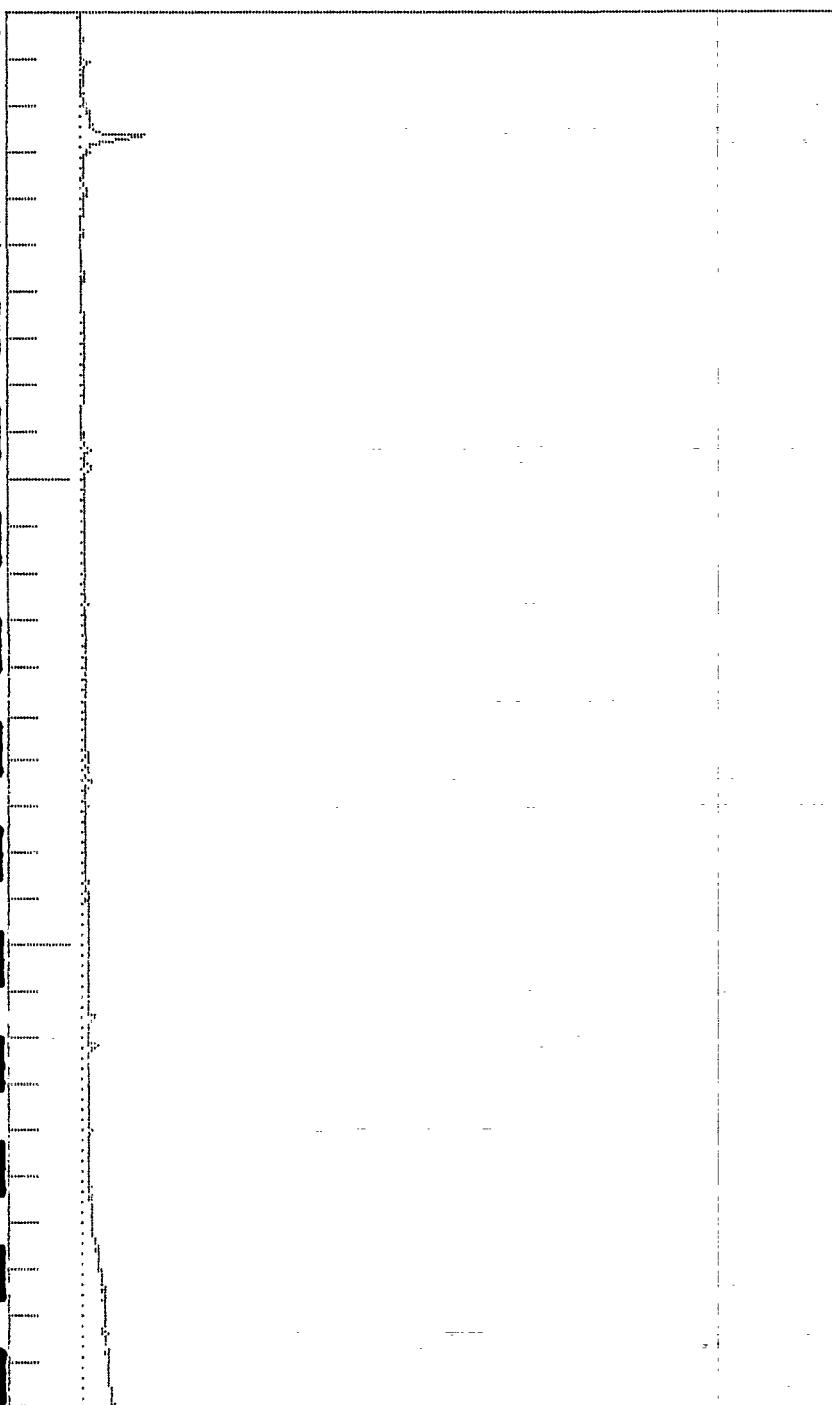
Component	Retention	Area	External	Internal	Units
Chloroform	9.433	25.77	0.37	0.3728	ug/L
1,1,1-Trichloroethane	9.800	26.37	0.80	0.7967	ug/L
Trichloroethylene	12.166	20.96	4.29	4.2927	ug/L

Lab name : IEES  
Client : CROWN CITY PLATING  
Column : J&W DB-624 75 m  
Carrier : HYDROGEN  
Temp. prog : SOL10.TEM  
Events : PURGE.EVT  
Components : C2815H.CPT  
Integration : Peak sens=95.0 Base sens=30.0 Min area= 10.00 Dilution= 1.00  
 Tangents=off  
Data file : CCH30.CHR ()  
Operator : PEARCE

-6..400mV

64..000mV

Component	Retention	Area	External	Units
-----------	-----------	------	----------	-------



(unknown) 2.616 13.10 N/A

Component	Retention	Area	External	Internal	Units
O	0	0.00	0.00	0.0000	

Lab name : IEES  
Client : CROWN CITY PLATING  
Column : J&W DB-624 75 m  
Carrier : HYDROGEN  
Temp. prog : SOL10.TEM  
Events : PURGE.EVT  
Components : C2815H.CPT  
Integration : Peak sens=95.0 Base sens=30.0 Min area= 10.00 Dilution= 1.00  
0 Tangents=off  
Data file : CCH31.CHR ()  
Operator : PEARCE

-6..400mV

64..000mV

Component	Retention	Area	External	Units
-----------	-----------	------	----------	-------

{unknown}	2.733	25.21	N/A
{unknown}	3.400	22.37	N/A

(unknown)	22.266	10.16	N/A
-----------	--------	-------	-----

Component	Retention	Area	External	Internal	Units
O	0.00	0.00	0.0000		

Lab name : IEES  
Client : CROWN CITY PLATING  
Column : J&W DB-624 75 m  
Carrier : HYDROGEN  
Temp. prog : SOL10.TEM  
Events : PURGE.EVT  
Components : C2815H.CPT  
Integration : Peak sens=95.0 Base sens=30.0 Min area= 10.00 Dilution= 1.00  
0 Tangents=off  
Data file : CCH32.CHR ()  
Operator : PEARCE

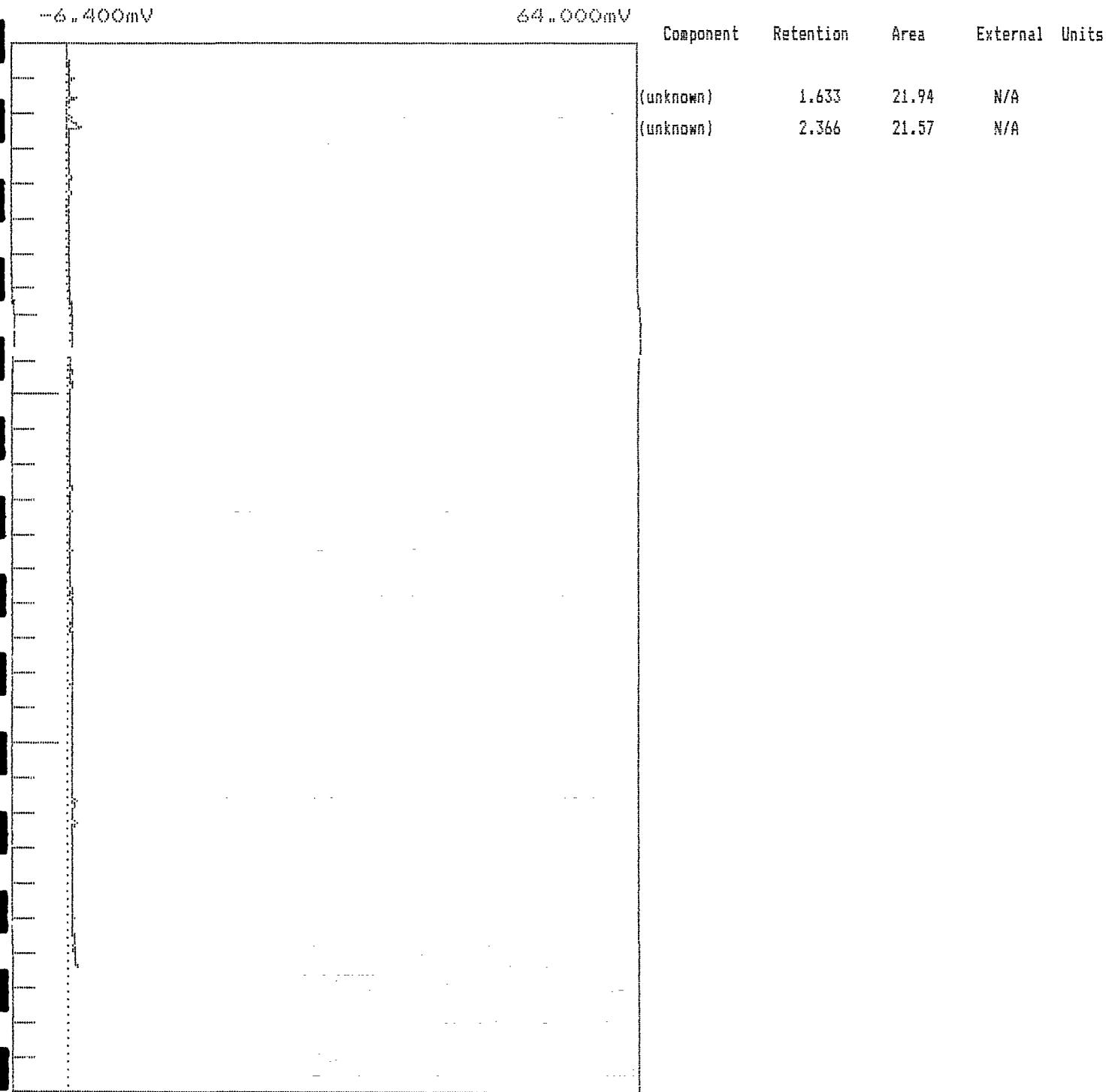
-6.400mV

64.000mV

Component	Retention	Area	External	Units
(unknown)	1.266	31.73	N/A	
(unknown)	1.783	573.21	N/A	
(unknown)	2.800	19.82	N/A	

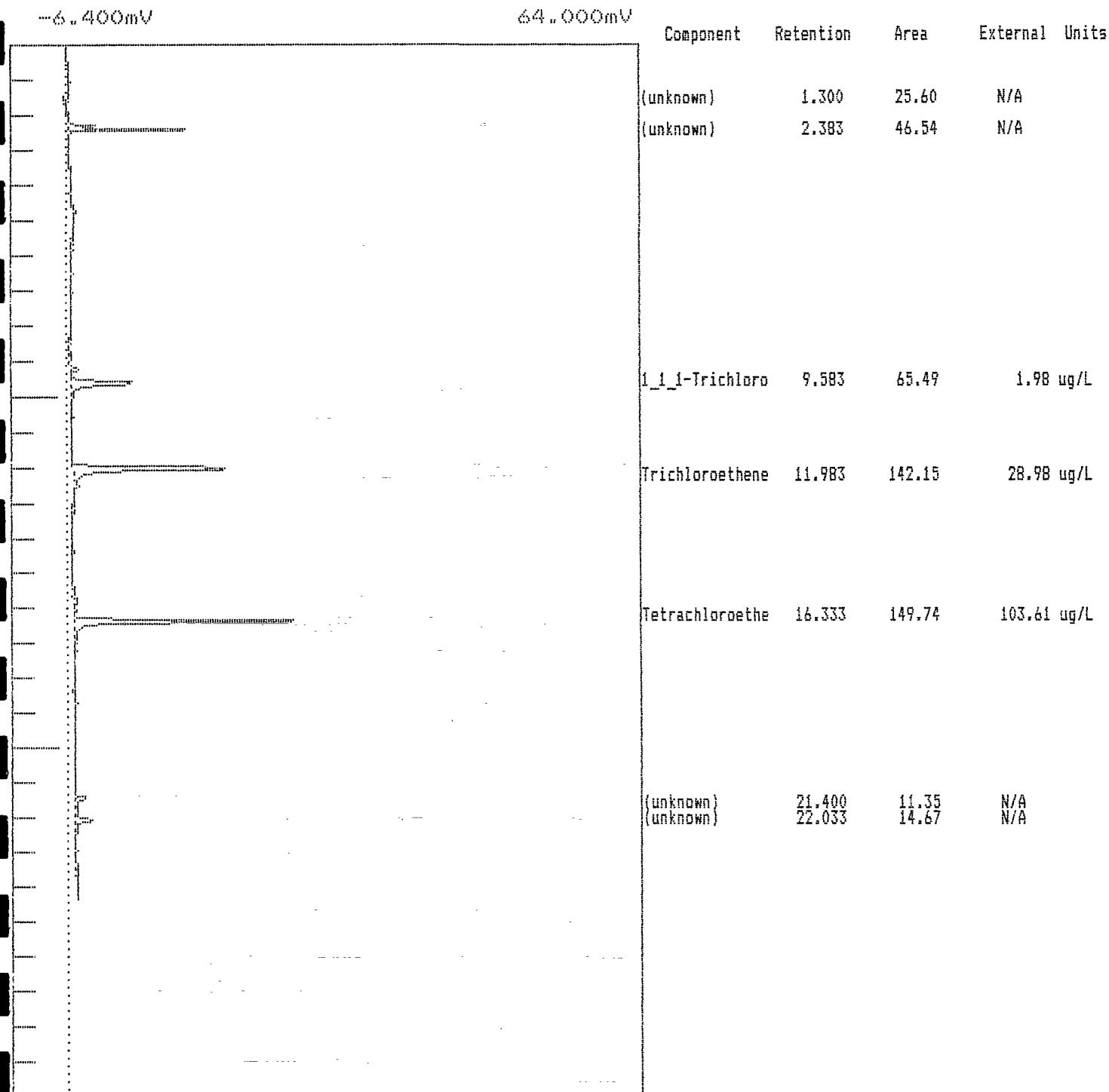
Component	Retention	Area	External	Internal	Units
0	0.00	0.00	0.0000		

Lab name : IEES  
Client : CROWN CITY PLATING  
Column : J&W DB-624 75 m  
Carrier : HYDROGEN  
Temp. prog : SOL10.TEM  
Events : PURGE.EVT  
Components : C2815H.CPT  
Integration : Peak sens=95.0 Base sens=30.0 Min area= 10.00 Dilution= 1.00  
 Tangents=off  
Data file : CCH33.CHR ()  
Operator : PEARCE



Component	Retention	Area	External	Internal	Units
	0	0.00	0.00	0.0000	

Lab name : IEES  
 Client : CROWN CITY PALTING  
 Column : J&W DB-624 75 m  
 Carrier : HYDROGEN  
 Temp. prog : SOL10.TEM  
 Events : PURGE.EVT  
 Components : C2815H.CPT  
 Integration : Peak sens=95.0 Base sens=30.0 Min area= 10.00 Dilution= 1.00  
 Tangents=off  
 Data file : CCH34.CHR ()  
 Operator : PEARCE



Component	Retention	Area	External	Internal	Units
1,1,1-Trichloroethane	9.583	65.49	1.98	1.9785	ug/L
Trichloroethylene	11.983	142.15	28.98	28.9795	ug/L
Tetrachloroethylene (PCE)	16.333	149.74	103.61	103.6139	ug/L

Lab name : IEES  
Client : CROWN CITY PLATING  
Column : J&W DB-624 75 m  
Carrier : HYDROGEN  
Temp. prog : SOL10.TEM  
Events : PURGE.EVT  
Components : C2815H.CPT  
Integration : Peak sens=95.0 Base sens=30.0 Min area= 10.00 Dilution= 1.00  
O Tangents=off  
Data file : cch35.chr ()  
Operator : PEARCE

-6.400mV

64.000mV

Component	Retention	Area	External	Units
-----------	-----------	------	----------	-------

(unknown)	2.150	35.99	N/A
-----------	-------	-------	-----

(unknown)	11.683	27.45	N/A
-----------	--------	-------	-----

(unknown)	21.450	10.83	N/A
(unknown)	22.116	12.03	N/A

Component	Retention	Area	External	Internal	Units
	0	0.00	0.00	0.0000	

Lab name : IEES  
 Client : CROWN CITY PLATING  
 Column : J&W DB-624 75 m  
 Carrier : HYDROGEN  
 Temp. prog : SOL10.TEM  
 Events : PURGE.EVT  
 Components : C2815H.CPT  
 Integration : Peak sens=95.0 Base sens=30.0 Min area= 10.00 Dilution= 1.00  
 O Tangents=off  
 Data file : CCH36.CHR ()  
 Operator : PEARCE

-6 .. 400mV

64 .. 000mV

Component	Retention	Area	External	Units
(unknown)	1.216	38.10	N/A	
(unknown)	1.366	333.09	N/A	
(unknown)	2.500	12.39	N/A	

**APPENDIX C**  
**PHOTO-IONIZATION DETECTOR CHROMATOGRAMS**

**INLAND EMPIRE ENVIRONMENTAL SERVICES**  
7291 ASHLEY AVENUE  
COLTON, CALIFORNIA 92324  
(714) 872-0501 FAX (714) 824-1442

Lab name : IEES  
Client : CROWN CITY  
Column : J&W DB-624 75m  
Carrier : HYDROGEN  
Temp. prog : SOL10.TEM  
Components : C2817PH.CPT  
Integration : Peak sens=95.0 Base sens=30.0 Min area= 25.00 Dilution= 1.00  
0 Tangents=off  
Data file : CCPH20.CHR ()  
Operator : PEARCE

-12.800mV

128.000mV

Component Number Retention Area External Units

1,1-Dichloroeth 7 4.683 35.64 N/A ug/L  
(unknown) 0 5.300 34.63 N/A

Trichloroethene 15 12.200 145.61 N/A ug/L

Toluene 52 15.250 52.39 1.17 ug/L

Tetrachloroethene 22 16.533 124.36 N/A ug/L

M-P Xylene 53 19.300 27.93 0.57 ug/L

D-Xylene 54 20.350 57.10 1.42 ug/L

Lab name : IEES  
 Client : CROWN CITY  
 Column : J&W DB-624 75m  
 Carrier : HYDROGEN  
 Temp. prog : SOL10.TEM  
 Components : C2817PH.CPT  
 Integration : Peak sens=95.0 Base sens=30.0 Min area= 25.00 Dilution= 1.00  
 Tangents=off  
 Data file : CCPH21.CHR ()  
 Operator : PEARCE

-12.800mV

128.000mV

Component	Number	Retention	Area	External	Units
(unknown)	0	4.550	53.01	N/A	
(unknown)	0	5.166	35.48	N/A	
(unknown)	0	9.100	260.43	N/A	
Trichloroethene	15	12.100	137.99	N/A	ug/L
Tetrachloroethe	22	16.483	229.58	N/A	ug/L
M-P Xylene	53	19.300	27.93	0.57	ug/L
1,4-Dichloroben	32	24.833	27.79	0.54	ug/L
(unknown)	0	25.816	25.36	N/A	
(unknown)	0	26.733	34.73	N/A	

Lab name : IEES  
Client : CROWN CITY  
Column : J&W DB-624 75m  
Carrier : HYDROGEN  
Temp. prog : SOL10.TEM  
Components : C2817PH.CPT  
Integration : Peak sens=95.0 Base sens=30.0 Min area= 25.00 Dilution= 1.00  
O Tangents=off  
Data file : CCPH22.CHR ()  
Operator : PEARCE

-12.800mV

128.000mV

Component	Number	Retention	Area	External	Units
-----------	--------	-----------	------	----------	-------

(unknown)	0	1.783	27.46	N/A	
-----------	---	-------	-------	-----	--

1,1-Dichloroeth	7	4.616	35.96	N/A	ug/L
-----------------	---	-------	-------	-----	------

(unknown)	0	5.450	127.35	N/A	
-----------	---	-------	--------	-----	--

(unknown)	0	5.900	338.23	N/A	
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(unknown)	0	9.250	59.55	N/A	
-----------	---	-------	-------	-----	--

Trichloroethene	15	12.183	223.71	N/A	ug/L
-----------------	----	--------	--------	-----	------

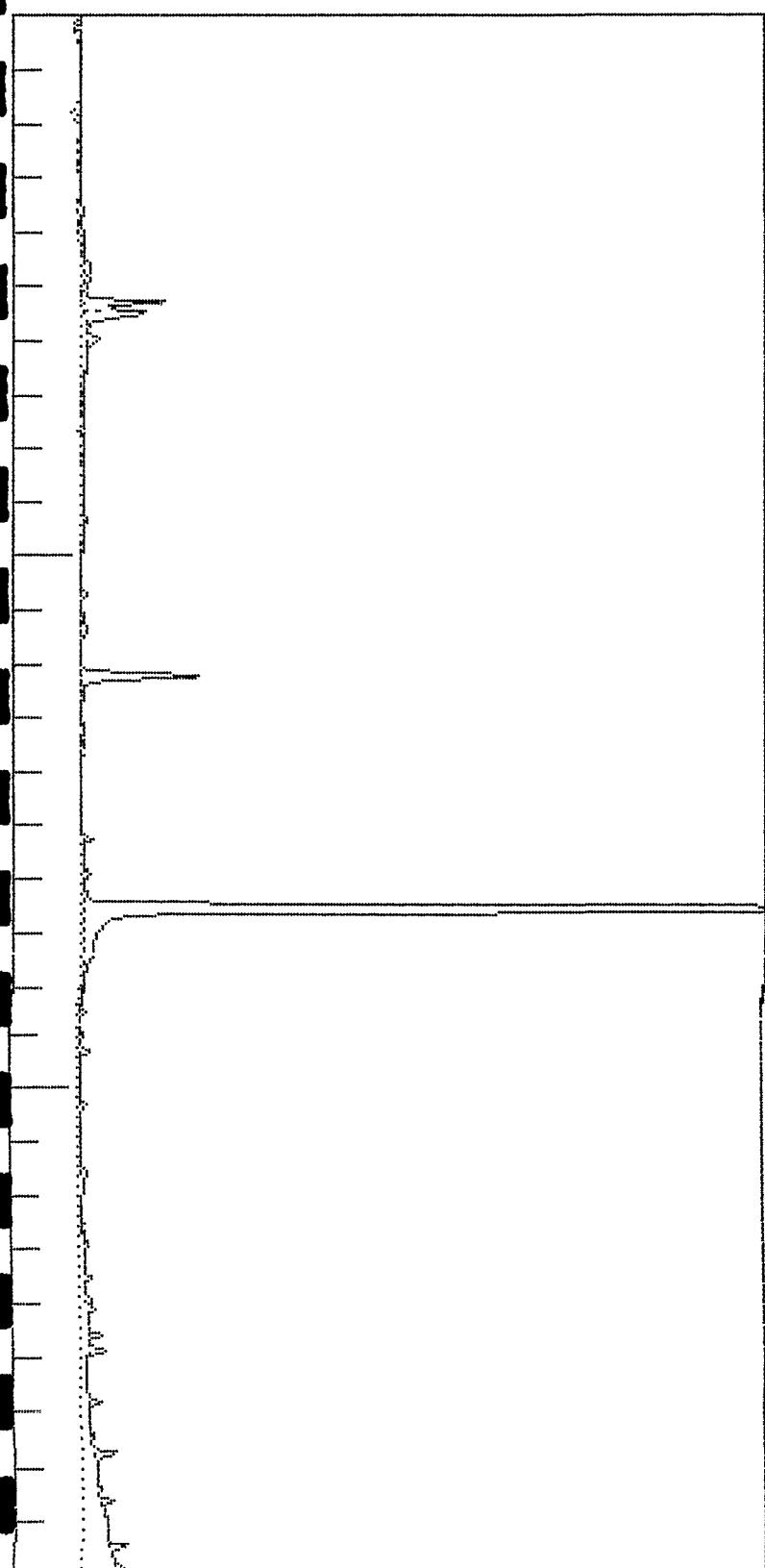
Tetrachloroethe	22	16.550	1003.09	N/A	ug/L
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M-P Xylene	53	19.350	28.07	0.57	ug/L
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Lab name : IEES  
Client : CROWN CITY  
Column : J&W DB-624 75m  
Carrier : HYDROGEN  
Temp. prog : SOL10.TEM  
Components : C2817PH.CPT  
Integration : Peak sens=95.0 Base sens=30.0 Min area= 25.00 Dilution= 1.00  
 Tangents=off  
Data file : CCPH23.CHR ()  
Operator : PEARCE

-12.800mV

128.000mV



Component	Number	Retention	Area	External	Units
(unknown)	0	4.316	25.68	N/A	
(unknown)	0	5.483	121.38	N/A	
Trichloroethene	15	12.216	173.93	N/A	ug/L
Tetrachloroethe	22	16.533	2340.30	N/A	ug/L
(unknown)	0	26.733	34.34	N/A	
(unknown)	0	28.433	27.89	N/A	

Lab name : IEES  
Client : CROWN CITY  
Column : J&W DB-624 75m  
Carrier : HYDROGEN  
Temp. prog : SOL10.TEM  
Components : C2817PH.CPT  
Integration : Peak sens=95.0 Base sens=30.0 Min area= 25.00 Dilution= 1.00  
O Tangents=off  
Data file : CCPH24.CHR ()  
Operator : PEARCE

-12.800mV

128.000mV

Component Number Retention Area External Units

(unknown) 0 4.600 36.90 N/A

Trichloroethene 15 12.250 34.60 N/A ug/L

Tetrachloroethe 22 16.566 463.36 N/A ug/L

(unknown) 0 26.750 31.36 N/A

Lab name : IEES  
 Client : CROWN CITY  
 Column : J&W DB-624 75m  
 Carrier : HYDROGEN  
 Temp. prog : SOL10.TEM  
 Components : C2817PH.CPT  
 Integration : Peak sens=95.0 Base sens=30.0 Min area= 25.00 Dilution= 1.00  
 Tangents=off  
 Data file : CCPH25.CHR ()  
 Operator : PEARCE

-128.000mV

128.000mV

Component	Number	Retention	Area	External	Units
(unknown)	0	6.000	26.74	N/A	
Tetrachloroethe	22	16.133 16.600	41.37 112.33	N/A N/A	ug/L
M-P Xylene	53	19.400	25.34	0.52	ug/L
(unknown)	0	21.666	28.82	N/A	
(unknown)	0	26.766	30.57	N/A	
(unknown)	0	28.483	29.98	N/A	

Lab name : IEEES  
Client : CROWN CITY  
Column : J&W DB-624 75m  
Carrier : HYDROGEN  
Temp. prog : SOL10.TEM  
Components : C2817PH.CPT  
Integration : Peak sens=95.0 Base sens=30.0 Min area= 25.00 Dilution= 1.00  
0 Tangents=off  
Data file : CCPH26.CHR ()  
Operator : PEARCE

-12.800mV

128.000mV

Component Number Retention Area External Units

1,1-Dichloroeth 7 4.666 27.95 N/A ug/L

(unknown) 0 11.183 26.86 N/A

Tetrachloroethe 22 16.516 100.19 N/A ug/L

(unknown) 0 26.783 32.55 N/A

Lab name : IEES  
Client : CROWN CITY  
Column : J&W DB-624 75m  
Carrier : HYDROGEN  
Temp. prog : SOL10.TEM  
Components : C2817PH.CPT  
Integration : Peak sens=95.0 Base sens=30.0 Min area= 25.00 Dilution= 1.00  
O Tangents=off  
Data file : CCPH27.CHR ()  
Operator : PEARCE

-12.800mV

128.000mV

Component	Number	Retention	Area	External	Units
-----------	--------	-----------	------	----------	-------

(unknown)	0	3.133	52.64	N/A	
1-i-Dichloroeth	7	4.766	38.48	N/A	ug/L

(unknown)	0	5.900	26.24	N/A	
-----------	---	-------	-------	-----	--

(unknown)	0	11.166	27.64	N/A	
Trichloroethene	15	12.116	79.11	N/A	ug/L

Tetrachloroethe	22	16.516	30.56	N/A	ug/L
-----------------	----	--------	-------	-----	------

(unknown)	0	21.600	25.66	N/A	
-----------	---	--------	-------	-----	--

(unknown)	0	26.783	30.66	N/A	
-----------	---	--------	-------	-----	--

Lab name : IEES  
Client : CROWN CITY  
Column : J&W DB-624 75m  
Carrier : HYDROGEN  
Temp. prog : SOL10.TEM  
Components : C2817PH.CPT  
Integration : Peak sens=95.0 Base sens=30.0 Min area= 25.00 Dilution= 1.00  
 Tangents=off  
Data file : CCPH28.CHR ()  
Operator : PEARCE

-128.000mV

128.000mV

Component	Number	Retention	Area	External	Units
-----------	--------	-----------	------	----------	-------

1,1-Dichloroeth	7	4.616	186.41	N/A	ug/L
(unknown)	0	5.483	40.78	N/A	
(unknown)	0	5.883	37.67	N/A	

Tetrachloroethe	22	16.483	89.87	N/A	ug/L
-----------------	----	--------	-------	-----	------

Lab name : IEES  
Client : CROWN CITY  
Column : J&W DB-624 75m  
Carrier : HYDROGEN  
Temp. prog : SOL10.TEM  
Components : C2817PH.CPT  
Integration : Peak sens=95.0 Base sens=30.0 Min area= 25.00 Dilution= 1.00  
 Tangents=off  
Data file : CCPH29.CHR ()  
Operator : PEARCE

-128.800mV

128.000mV

Component Number Retention Area External Units

1,1-Dichloroethene 7 4.633 33.54 N/A ug/L

Trichloroethene 15 12.150 67.56 N/A ug/L

Lab name : IEES  
Client : CROWN CITY  
Column : J&W DB-624 75m  
Carrier : HYDROGEN  
Temp. prog : SOL10.TEM  
Components : C2817PH.CPT  
Integration : Peak sens=95.0 Base sens=30.0 Min area= 25.00 Dilution= 1.00  
 Tangents=off  
Data file : CCPH30.CHR ()  
Operator : PEARCE

-12.000mV

128.000mV

Component Number Retention Area External Units

(unknown) 0 4.583 76.20 N/A

Lab name : IEES  
Client : CROWN CITY  
Column : J&W DB-624 75m  
Carrier : HYDROGEN  
Temp. prog : SOL10.TEM  
Components : C2817PH.CPT  
Integration : Peak sens=95.0 Base sens=30.0 Min area= 25.00 Dilution= 1.00  
Tangents=off  
Data file : CCPH31.CHR ()  
Operator : PEARCE

-12.000mV

128.000mV

Component	Number	Retention	Area	External	Units
1,1-Dichloroeth	7	4.616	46.39	N/A	ug/L
(unknown)	0	5.833	26.21	N/A	
(unknown)	0	12.450	25.98	N/A	
(unknown)	0	21.600	27.26	N/A	
(unknown)	0	26.883	31.94	N/A	

Lab name : IEES  
Client : CROWN CITY  
Column : J&W DB-624 75m  
Carrier : HYDROGEN  
Temp. prog : SOL10.TEM  
Components : C2817PH.CPT  
Integration : Peak sens=95.0 Base sens=30.0 Min area= 25.00 Dilution= 1.00  
O Tangents=off  
Data file : CCPH32.CHR ()  
Operator : PEARCE

-12.800mV

128.000mV

Component	Number	Retention	Area	External	Units
-----------	--------	-----------	------	----------	-------

(unknown)	0	4.566	37.77	N/A	
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Trichloroethene	15	12.133	38.94	N/A	ug/L
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(unknown)	0	26.850	36.68	N/A	
-----------	---	--------	-------	-----	--

Lab name : IEES  
Client : CROWN CITY  
Column : J&W DB-624 75m  
Carrier : HYDROGEN  
Temp. prog : SOL10.TEM  
Components : C2817PH.CPT  
Integration : Peak sens=95.0 Base sens=30.0 Min area= 25.00 Dilution= 1.00  
O Tangents=off  
Data file : CCPH33.CHR ()  
Operator : PEARCE

-12.800mV

128.000mV

Component	Number	Retention	Area	External	Units
-----------	--------	-----------	------	----------	-------

(unknown)	0	4.600	52.96	N/A
-----------	---	-------	-------	-----

Lab name : IEEES  
Client : CROWN CITY  
Column : J&W DB-624 75m  
Carrier : HYDROGEN  
Temp. prog : SOL10.TEM  
Components : C2817PH.CPT  
Integration : Peak sens=95.0 Base sens=30.0 Min area= 25.00 Dilution= 1.00  
O Tangents=off  
Data file : CCPH34.CHR ()  
Operator : PEARCE

-12.800mV

128.000mV

Component Number Retention Area External Units

(unknown) 0 4.416 48.66 N/A

Trichloroethene 15 11.950 246.19 N/A ug/L

trans1,3-Dichlor 20 15.716 35.30 N/A ug/L

Tetrachloroethe 22 16.316 217.24 N/A ug/L

(unknown) 0 21.366 26.36 N/A

Lab name : IEES  
Client : CROWN CITY  
Column : J&W DB-624 75m  
Carrier : HYDROGEN  
Temp. prog : SOL10.TEM  
Components : C2817PH.CPT  
Integration : Peak sens=95.0 Base sens=30.0 Min area= 25.00 Dilution= 1.00  
O Tangents=off  
Data file : CCPH35.CHR ()  
Operator : PEARCE

-12.800mV

128.000mV

Component	Number	Retention	Area	External	Units
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(unknown)	0	4.283	75.75	N/A
-----------	---	-------	-------	-----

(unknown)	0	11.650	123.99	N/A
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(unknown)	0	15.566	36.55	N/A
(unknown)	0	16.183	47.87	N/A

(unknown)	0	21.416	26.71	N/A
-----------	---	--------	-------	-----

Lab name : IEEES  
Client : CROWN CITY  
Column : J&W DB-624 75m  
Carrier : HYDROGEN  
Temp. prog : SOL10.TEM  
Components : C2817PH.CPT  
Integration : Peak sens=95.0 Base sens=30.0 Min area= 25.00 Dilution= 1.00  
O Tangents=off  
Data file : CCPH36.CHR ()  
Operator : PEARCE

-12.800mV

128.000mV

Component	Number	Retention	Area	External	Units
-----------	--------	-----------	------	----------	-------

(unknown)	0	4.516	38.41	N/A
-----------	---	-------	-------	-----

Lab name : IEES  
Client : ALLFAST  
Column : J&W DB-624 75m  
Carrier : HYDROGEN  
Temp. prog : SOL10.TEM  
Components : C2817PH.CPT  
Integration : Peak sens=95.0 Base sens=30.0 Min area= 25.00 Dilution= 1.00  
0 Tangents=off  
Data file : CCPH37.CHR ()  
Operator : PEARCE

-12.800mV

128.000mV

Component	Number	Retention	Area	External	Units
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(unknown)	0	4.400	58.71	N/A	
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Trichloroethene	15	12.000	104.25	N/A	ug/L
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trans1,3-Dichloroethene	20	15.716	35.86	N/A	ug/L
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Tetrachloroethene	22	16.333	164.69	N/A	ug/L
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**APPENDIX D  
PRE-SURVEY CALIBRATIONS**

**INLAND EMPIRE ENVIRONMENTAL SERVICES  
7291 ASHLEY AVENUE  
COLTON, CALIFORNIA 92324  
(714) 872-0501 FAX (714) 824-1442**

**SOIL GAS INITIAL CALIBRATION STANDARD REPORT**

DATE: \_\_\_\_\_

ANALYST: TEMPICESTD SOURCE: ULTRAH SENSITCEMACHINE ID: CFI

COMPOUND	DETECTOR	1st CONC <u>3ug/l</u>				2nd CONC <u>10ug/l</u>				3rd CONC <u>50ug/l</u>				RF ave	SD	XRSID		
		RT	MASS	AREA	RF	RT	MASS	AREA	RF	RT	MASS	AREA	RF					
Bromobenzene	ECD		9cc				9cc				9cc							
Bromodichloromethane				81.7	27.2				240.4	24				1226.2	24.5	25.2	1.79	7
Bromoform																		
Bromomethane																		
Carbon tetrachloride				219.2	73				624.5	62.4				3144.1	62.9	66	5.98	9
Chloroethane				33.8	11.2				92.8	9.3				478.5	9.6	10	1.02	10
Chloroform				207.4	69				621	62.1				3044.8	60.9	64	4.37	7
Chloromethane				13.8	4.6				43.2	4.3				229.8	4.6	4.5	.17	4
Dibromochloromethane				27.4	9.1				92.2	9.2				463.4	9.3	9.2	.1	1
Dibromomethane				69.8	23.3									745.6	14.9			
Dichloromethane				111.3	37.1				345.2	34.5				1723.3	34.5	35.4	1.3	4
1,1-Dichloroethane				105.5	35.2				374.3	37.4				709.5	40.4	39.7	2.6	7
1,2-Dichloroethane				105.7	35.2				361.1	36.1				1874.7	37.5	36.3	1.16	3
1,1-Dichloroethene				11.7	3.9				31.1	3.1				149.2	3	2.3	.49	15
c-1,2-Dichloroethene																		
t-1,2-Dichloroethene				21.6	7.2				71	7.1				353.8	7.1	7.1	.05	-1
1,2-Dichloropropene				120	40				390	39				1939.6	38.8	27.3	.64	2
c-1,3-Dichloropropene				89	29.7				242.2	24.2				1197.5	24	26	3.2	13
t-1,3-Dichloropropene				17.8	5.9				61	6.1				297.1	5.7	6	.11	2
1,1,1,2-Tetrachloroethane				68	22.7				171.4	17.4				888.7	17.8	19.3	2.95	15
1,1,2,2-Tetrachloroethane																		
Tetrachloroethene				4	1.3				14	1.4				72	1.5	1.4	.15	11
1,1,1-Trichloroethane				99.3	33.1				347.9	34.8				1944.2	38.8	35.6	2.9	8
1,1,2-Trichloroethane				82.3	27.4				200.3	20.				1011.1	20.2	20.9	1.53	6
Trichloroethene				15	5				47.3	4.7				247.2	4.9	4.9	.15	3
1,2,3-Trichloropropane																		
Trichlorofluoromethane				18.4	6.1				47.6	4.8				231.6	4.4	5.1	.88	17
Vinyl chloride				20.7	6.9				68.9	6.9				334.4	6.7	6.8	.11	2
Benzene	PID			147.6	49.2				497.4	49.5				2463	49.3	49.3	.15	-1
Chlorobenzene				25.8	71.9				717.4	71.7				3663	73.3	72.3	.87	1
1,2-Dichlorobenzene				151.1	50.4				497.4	49.7				2502	50	50	.88	2
1,3-Dichlorobenzene				169.9	56.6				552.4	56.2				2848	57	56.3	.94	2
1,4-Dichlorobenzene				165.5	51.8				519	51.9				2602	52	51.9	.1	-1
Ethyl benzene				113.4	37.8				385.3	39.5				1980	39.6	38.6	.9	2
Toluene				134.2	44.7				457	45.7				2220	44.4	44.9	.68	1
m,p-Xylenes				146.8	48.9				488.4	48.8				2420	49.2	49	.2	-1
o-Xylene				120.7	40.2				374.5	29.4				2006.4	40.1	39.9	.4	1

Lab name : IEES  
 Client : CROWN CITY  
 Column : J&W DB-624 75m  
 Carrier : HYDROGEN  
 Temp. prog : SOL10.TEM  
 Components : 817PH.CPT  
 Integration : Peak sens=95.0 Base sens=30.0 Min area= 10.00 Dilution= 1.00  
 Tangents=off  
 Data file : CC2CPH5.CHR ()  
 Operator : PEARCE

-256.600mV

256.000mV

Component	Number	Retention	Area
(unknown)	0	1.850	36.08
(unknown)	0	3.166	16.71
Vinyl Chloride	3	3.616	200.13
(unknown)	0	5.100	121.59
(unknown)	0	5.283	1329.71
(unknown)	0	5.666	261.85
trans1,2Dichlor	9	6.333	1291.58
(unknown)	0	8.950	31.27
(unknown)	0	9.300	12.13
Benzene	51	10.766	2463.01
(unknown)	0	11.300	11.74
Trichloroethene	15	12.216	627.82
(unknown)	0	13.400	11.13
cis1,3-Dichlorop	19	14.483	160.00
Toluene	52	15.266	2220.32
trans1,3-Dichlor	20	15.833	99.96
Tetrachloroethe	22	16.500	425.10
Chlorobenzene	25	18.650	3663.11
Ethylbenzene	55	19.033	1980.56
M-P Xylene	53	19.316	2460.75
O-Xylene	54	20.333	2006.39
(unknown)	0	21.516	35.51
(unknown)	0	22.883	21.71
(unknown)	0	23.500	16.81
(unknown)	0	24.050	14.24
(unknown)	0	24.583	2848.73
(unknown)	0	24.833	2602.17
(unknown)	0	25.850	2502.27
(unknown)	0	26.700	49.71
(unknown)	0	27.333	13.97
(unknown)	0	27.600	31.55
(unknown)	0	28.416	27.01

**Component****Number****Retention****Area**

(unknown)	0	1.850	36.08
(unknown)	0	3.166	16.71
Vinyl Chloride	0	3.616	200.13
(unknown)	0	5.100	121.59
(unknown)	0	5.283	1329.71
(unknown)	0	5.666	261.85
trans1,2Dichloroethene	9	6.333	1291.58
(unknown)	0	8.950	31.27
(unknown)	0	9.300	12.13
Benzene	51	10.766	2463.01
(unknown)	0	11.300	11.74
Trichloroethene	15	12.216	627.82
(unknown)	0	13.400	11.13
cis1,3-Dichloropropene	19	14.483	160.00
Toluene	52	15.266	2220.32
trans1,3-Dichloropropene	20	15.833	99.96
Tetrachloroethene	22	16.500	425.10
Chlorobenzene	25	18.650	3663.11
Ethylbenzene	55	19.033	1980.56
M-P Xylene	53	19.316	2460.75
O-Xylene	54	20.333	2006.39
(unknown)	0	21.516	35.51
(unknown)	0	22.883	21.71
(unknown)	0	23.500	16.81
(unknown)	0	24.050	14.24
(unknown)	0	24.583	2848.73
(unknown)	0	24.833	2602.17
(unknown)	0	25.850	2502.27
(unknown)	0	26.700	49.71
(unknown)	0	27.333	13.97
(unknown)	0	27.600	31.55
(unknown)	0	28.416	27.01
(unknown)	0	29.266	12.58
(unknown)	0	29.500	12.50
(unknown)	0	30.000	16.02

Lab name : IEES  
 Client : CROWN CITY  
 Column : J&W DB-624 75m  
 Carrier : HYDROGEN  
 Temp. prog : SOL10.TEM  
 Components : C2817PH.CPT  
 Integration : Peak sens=95.0 Base sens=30.0 Min area= 10.00 Dilution= 1.00  
 Tangents=off  
 Data file : CC2CPH7.CHR ()  
 Operator : PEARCE

-12.800mV

128.000mV

Component Number Retention Area

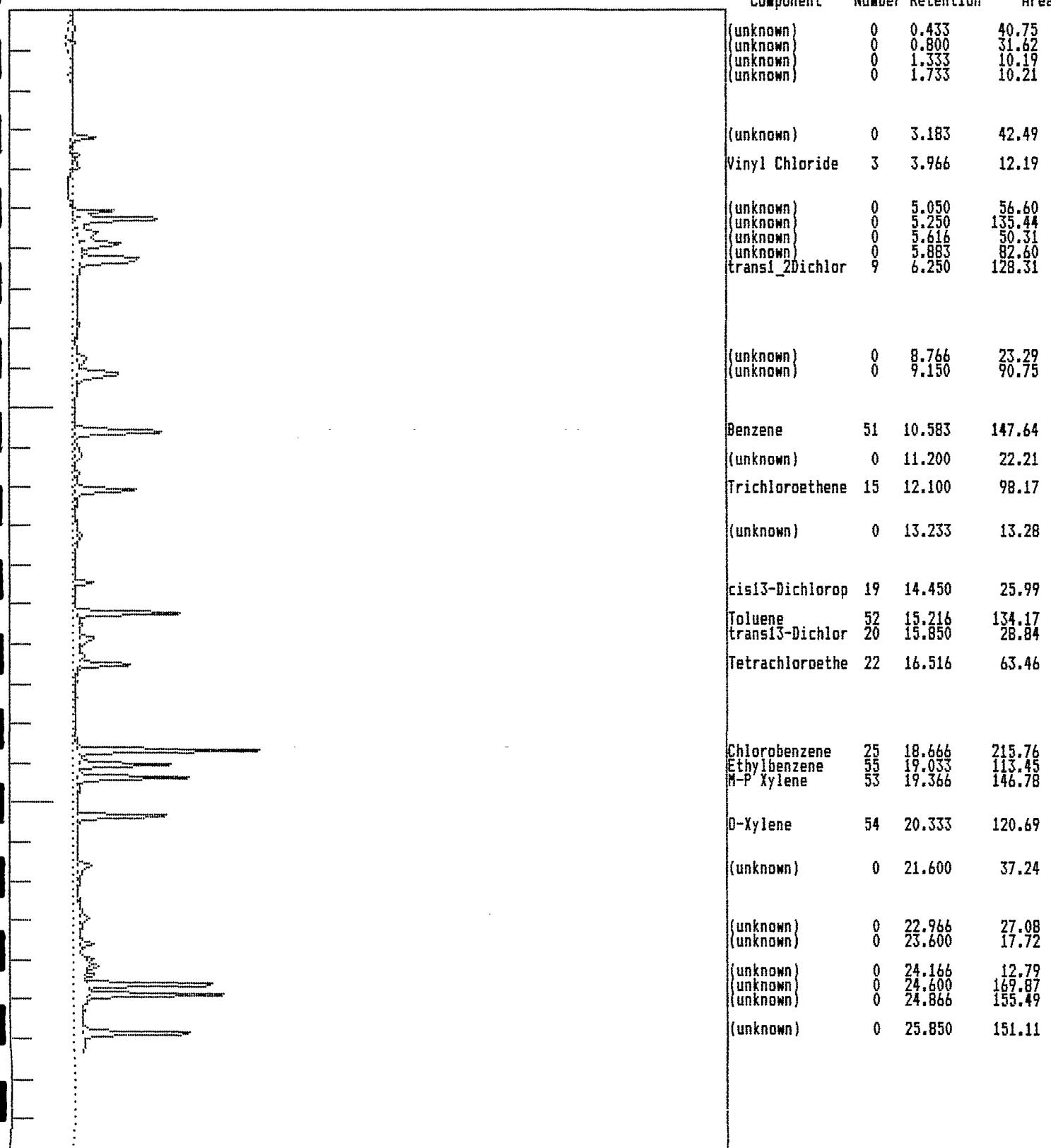
(unknown)	0	3.183	23.62
Vinyl Chloride	3	3.666	32.20
(unknown)	0	5.116	110.26
(unknown)	0	5.333	312.93
(unknown)	0	5.866	27.37
trans1,2Dichlor	9	6.333	300.38
(unknown)	0	8.600	60.44
Benzene	51	10.516	497.44
Trichloroethene	15	12.033	207.06
cis1,3-Dichlorop	19	14.400	64.56
Toluene	52	15.200	456.99
trans1,3-Dichlor	20	15.816	47.26
Tetrachloroethe	22	16.483	148.09
Chlorobenzene	25	18.650	717.45
Ethylbenzene	55	19.016	385.24
M-P Xylene	53	19.333	488.44
O-Xylene	54	20.333	394.48
(unknown)	0	21.583	26.47
(unknown)	0	22.950	21.23
(unknown)	0	23.583	10.74
(unknown)	0	24.150	10.04
(unknown)	0	24.600	552.41
(unknown)	0	24.866	519.03
(unknown)	0	25.850	497.37
(unknown)	0	26.750	36.20

Component	Number	Retention	Area
(unknown)	0	3.183	23.62
Vinyl Chloride	3	3.666	32.20
1,1-Dichloroethene	7	4.866	21.54
(unknown)	0	5.116	110.26
(unknown)	0	5.333	312.93
(unknown)	0	5.683	11.45
(unknown)	0	5.866	27.37
trans1,2Dichloroethene	9	6.333	300.38
(unknown)	0	8.600	60.44
Benzene	51	10.516	497.44
Trichloroethene	15	12.033	207.06
cis1,3-Dichloropropene	19	14.400	64.56
Toluene	52	15.200	456.99
trans1,3-Dichloropropene	20	15.816	47.26
Tetrachloroethene	22	16.483	148.09
Chlorobenzene	25	18.650	717.45
Ethylbenzene	55	19.016	385.24
M-P Xylene	53	19.333	488.44
O-Xylene	54	20.333	394.48
(unknown)	0	21.583	26.47
(unknown)	0	22.950	21.23
(unknown)	0	23.583	10.74
(unknown)	0	24.150	10.04
(unknown)	0	24.600	552.41
(unknown)	0	24.866	519.03
(unknown)	0	25.850	497.37
(unknown)	0	26.750	36.20

4d1e42F1E  
 Axq < Ab<@e A  
 @D@e Lab name : CROWN CITY PLATING  
 Client : CROWN CITY PLATING  
 Column : J&W DB-624 75m  
 Carrier : HYDROGEN  
 Temp. prog : SOL10.TEM  
 Components : C2817PH.CPT  
 Integration : Peak sens=95.0 Base sens=30.0 Min area= 10.00 Dilution= 1.00  
 0 Tangents=off  
 Data file : cc2cpbh6.chr ()  
 Operator : PEARCE

-12.800mV

128.000mV



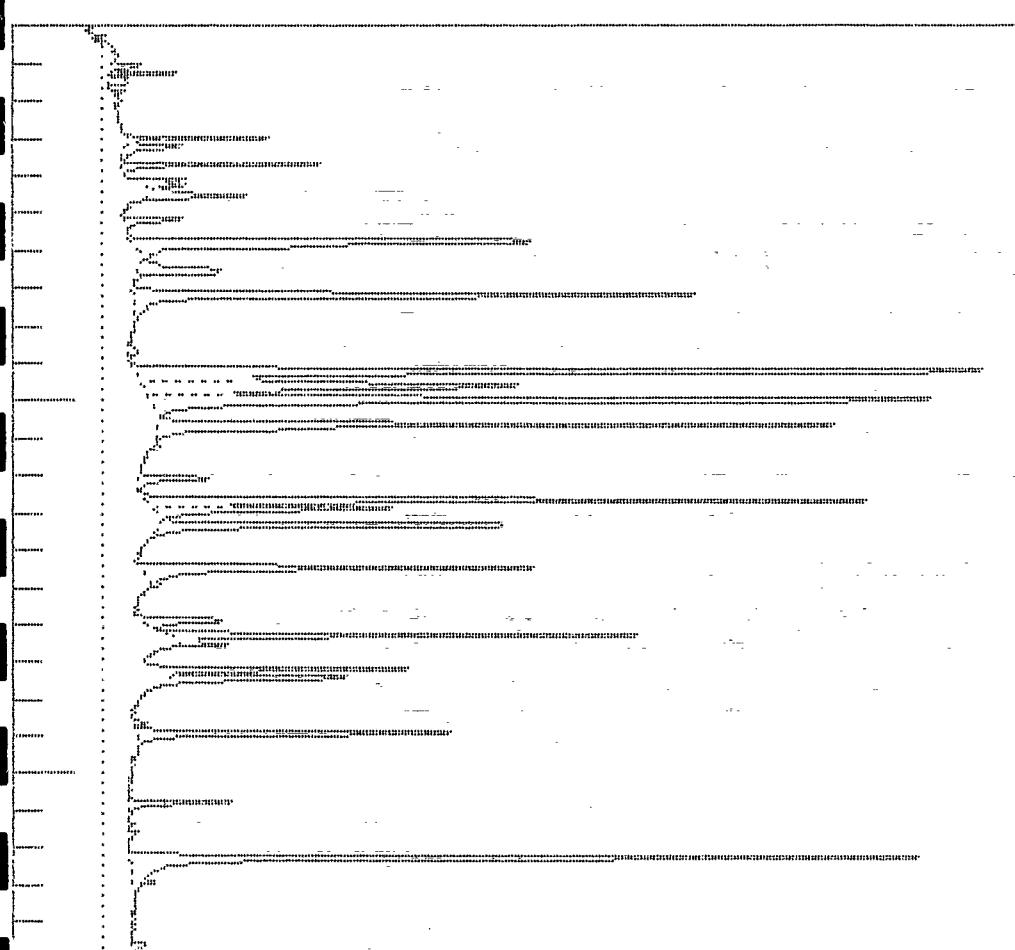
Component	Number	Retention	Area
(unknown)	0	0.433	40.75
(unknown)	0	0.600	31.62
(unknown)	0	1.333	10.19
(unknown)	0	1.733	10.21
(unknown)	0	3.183	42.49
Vinyl Chloride	3	3.966	12.19
(unknown)	0	5.050	56.60
(unknown)	0	5.250	135.44
(unknown)	0	5.616	50.31
(unknown)	0	5.883	82.60
trans-2-Dichloroethene	9	6.250	128.31
(unknown)	0	6.766	23.29
(unknown)	0	9.150	90.75
Benzene	51	10.583	147.64
(unknown)	0	11.200	22.21
Trichloroethene	15	12.100	98.17
(unknown)	0	13.233	13.28
cis-1,3-Dichloropropene	19	14.450	25.99
Toluene	52	15.216	134.17
trans-1,3-Dichloropropene	20	15.650	28.84
Tetrachloroethene	22	16.516	63.46
Chlorobenzene	55	18.666	215.76
Ethylbenzene	55	19.033	113.45
M-E Xylene	53	19.366	146.78
O-Xylene	54	20.333	120.69
(unknown)	0	21.600	37.24
(unknown)	0	22.966	27.08
(unknown)	0	23.600	17.72
(unknown)	0	24.166	12.79
(unknown)	0	24.600	169.87
(unknown)	0	24.866	155.49
(unknown)	0	25.850	151.11

Lab name : IEES  
 Client : ALLFAST  
 Column : J&W DB-624 75 m  
 Carrier : HYDROGEN  
 Temp. prog : SOL10.TEM  
 Events : PURGE.EVT  
 Components : C2B15H.CPT  
 Integration : Peak sens=95.0 Base sens=30.0 Min area= 10.00 Dilution= 1.00  
 O Tangents=off  
 Data file : CC2CH7.CHR ()  
 Operator : PEARCE

H/C

-6..400mV

64..000mV



Component	Number	Retention	Area
(unknown)	0	0.633	10.11
(unknown)	0	1.366	26.26
Chloromethane	2	3.216	43.20
Vinyl Chloride	3	3.683	68.91
chloroethane	4	4.200	92.80
Trichlorodifluo	6	4.500	47.58
(unknown)	8	5.166	31.11
Methylene Chlor	8	5.716	345.17
trans1_2-Dichlo	9	6.516	70.97
i_1-Dichloroeth	10	7.166	374.34
Chloroform	11	9.200	621.01
i_1_1-Trichloro	12	9.600	347.87
Carbonetetrachlo	13	9.956	624.46
i_2-Dichloroeth	14	10.616	361.11
Trichloroethene	15	12.050	47.33
i_2-Dichloropro	16	12.616	389.96
Bromodichlorome	18	13.300	240.43
cisi_3-Dichloro	19	14.433	242.25
transi_3-Dichlo	20	15.866	61.05
Tetrachloroethe	22	16.500	13.94
i_2-Dichloroeth	24	17.383	110.08
i_1_i_1_2-TCA	26	18.916	174.44
Bromoform	39	20.783	51.55
(unknown)	0	22.250	483.81
(unknown)	0	24.883	13.12

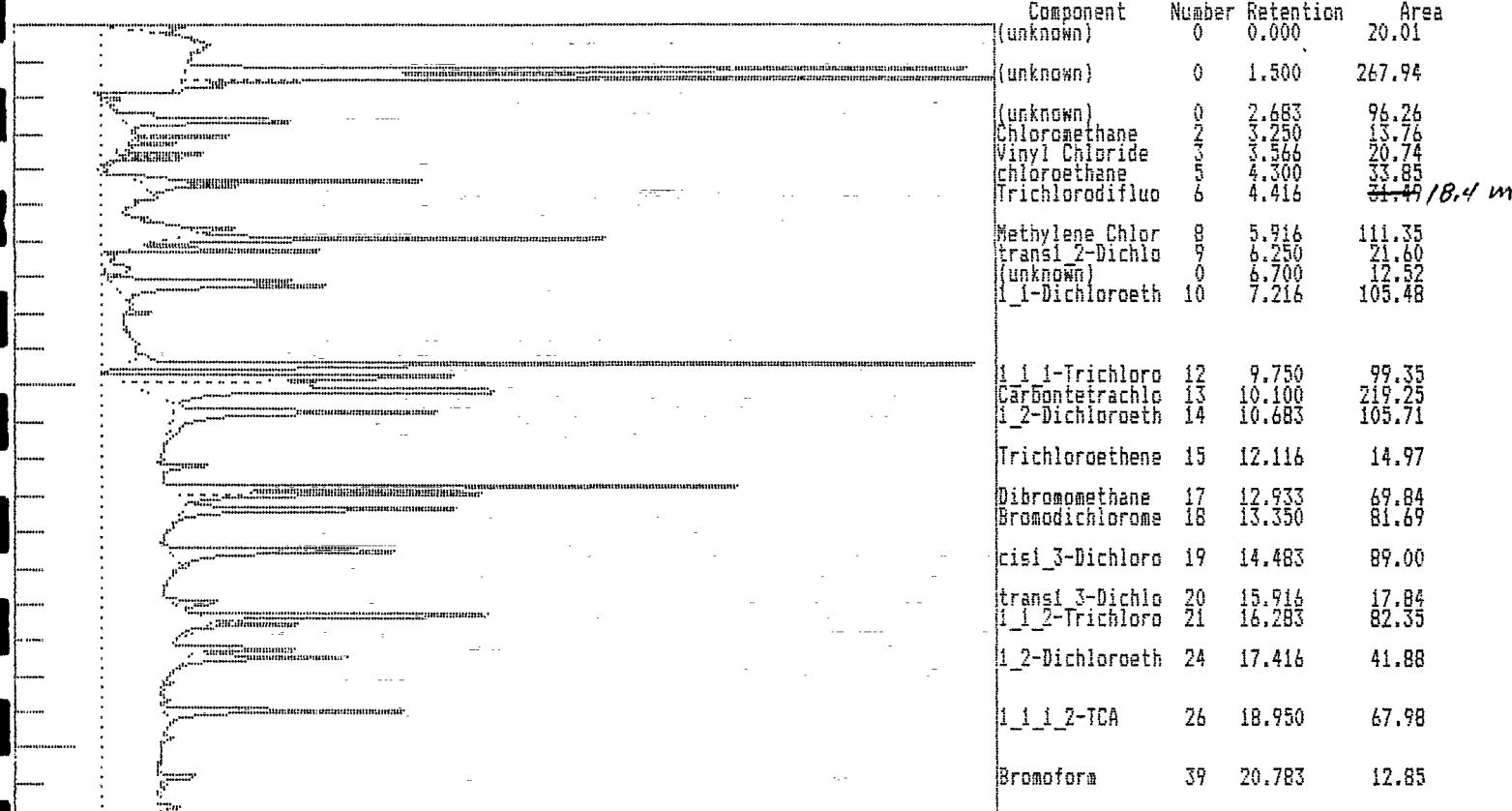
Component	Number	Retention	Area
(unknown)	0	0.433	10.11
(unknown)	0	1.050	11.69
(unknown)	0	1.366	26.26
Dichlorodifluoromethane	1	3.016	60.74
Chloromethane	2	3.214	43.20
Vinyl Chloride	3	3.683	68.91
chloroethane	5	4.200	92.80
Trichlorodifluoromethane	6	4.500	47.56
(unknown)	0	5.166	31.11
Methylene Chloride	8	5.716	345.17
trans1,2-Dichloroethene	9	6.516	70.97
1,1-Dichloroethane	10	7.166	374.34
Chloroform	11	9.200	621.01
1,1,1-Trichloroethane	12	9.400	347.87
Carbon tetrachloride	13	9.966	624.46
1,2-Dichloroethane	14	10.616	361.11
Trichloroethene	15	12.050	47.33
1,2-Dichloropropane	16	12.816	389.76
Bromodichloromethane	18	13.300	240.43
cis1,3-Dichloropropane	19	14.433	242.25
trans1,3-Dichloropropene	20	15.866	61.05
1,1,2-Trichloroethane	21	16.250	200.30
Tetrachloroethene (PCE)	22	16.500	13.94
Dibromochloromethane	23	17.166	92.17
1,2-Dichloroethane	24	17.383	110.08
1,1,1,2-TCA	26	18.916	174.44
Bromoform	39	20.783	51.55
(unknown)	0	22.250	463.61
(unknown)	0	24.883	13.12

Lab name : IEES  
 Client : CROWN CITY PLATING  
 Column : J&W DB-624 75 m  
 Carrier : HYDROGEN  
 Temp. prog : SOL10.TEM  
 Events : PURGE.EVT  
 Components : C2815H.CPT  
 Integration : Peak sens=95.0 Base sens=30.0 Min area= 10.00 Dilution= 1.00  
 O Tangents=off  
 Data file : cc2ch6.CHR ()  
 Operator : PEARCE

4/3

-32.200mV

32.000mV



Component	Number	Retention	Area
(unknown)	0	0.000	20.01
(unknown)	0	1.164	335.24
(unknown)	0	1.500	267.94
(unknown)	0	2.683	96.26
Dichlorodifluoromethane	1	3.016	47.36
Chloromethane	2	3.250	13.76
Vinyl Chloride	3	3.566	20.74
chloroethane	4	4.300	33.85
Trichlorodifluoromethane	5	4.416	31.17 - m 18.4
1,1-Dichloroethene	7	5.616	11.74
Methylene Chloride	8	5.916	111.35
trans-1,2-Dichloroethene	9	6.250	21.60
(unknown)	0	6.700	12.52
1,1-Dichloroethane	10	7.216	105.48
Chloroform	11	9.383	207.42
1,1,1-Trichloroethane	12	9.750	99.35
Carbonetetrachloride	13	10.100	219.25
1,2-Dichloroethane	14	10.683	105.71
Trichloroethene	15	12.116	14.97
1,2-Dichloropropane	16	12.716	120.06
Bromomethane	17	12.933	69.84
Bromodichloromethane	18	13.350	61.69
cis-1,3-Dichloropropane	19	14.483	62.00
trans-1,3-Dichloropropene	20	15.916	17.84
1,1,2,7-tetrachloroethane	21	16.283	62.35
Dibromochloromethane	23	17.200	30.30
1,2-Dichloroethane	24	17.416	41.88
1,1,1,2-TCA	26	18.950	67.98
Bromoform	39	20.783	12.65
(unknown)	0	22.266	221.61

30

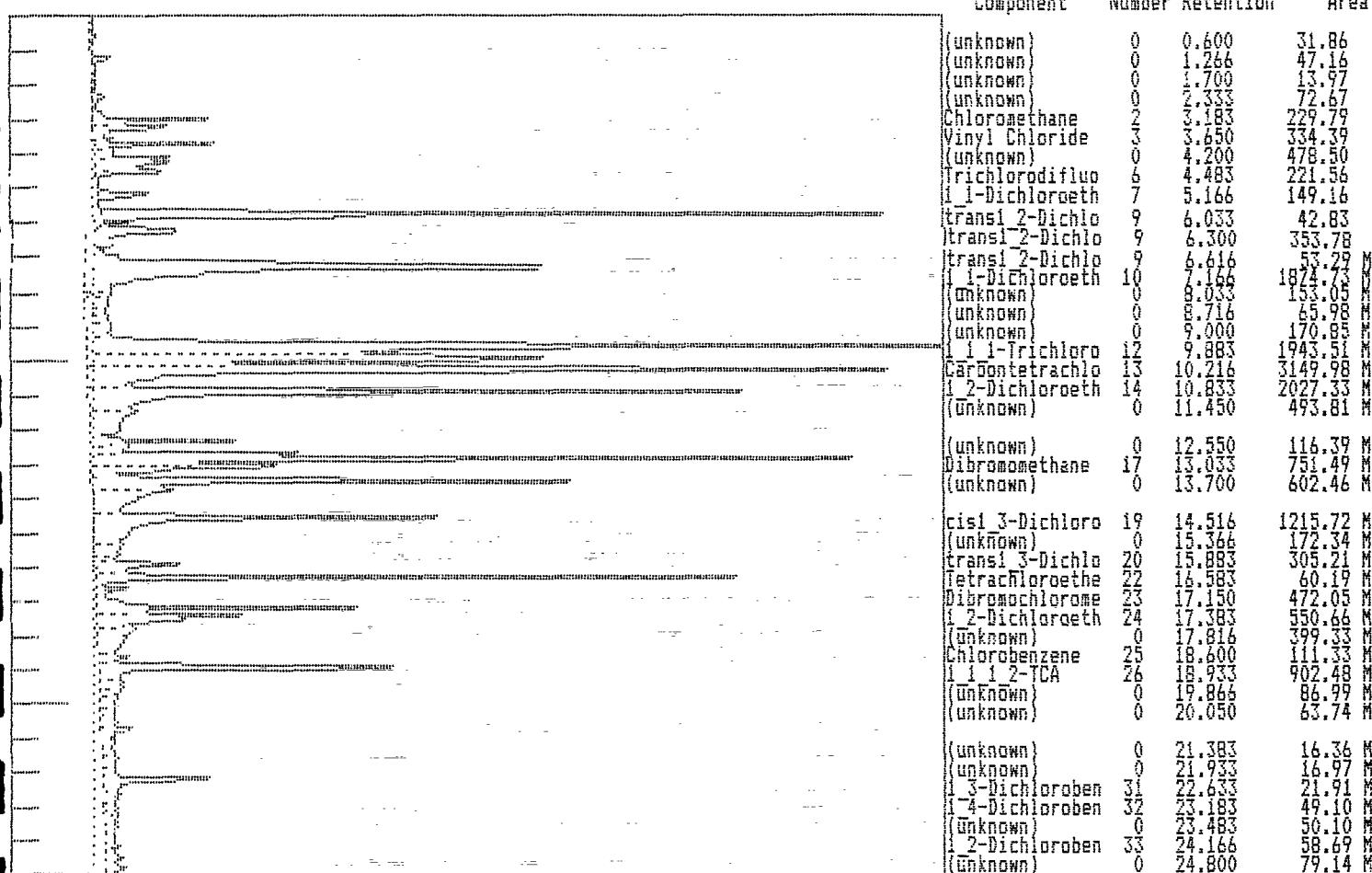
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Lab name : IEES  
 Client : ALLFAST  
 Column : J&W DB-624 75 m  
 Carrier : HYDROGEN  
 Temp. prog : SOL10.TEM  
 Events : PURGE.EVT  
 Components : C2815H.CPT  
 Integration : Peak sens=95.0 Base sens=30.0 Min area= 10.00 Dilution= 1.00  
 O Tangents=off  
 Data file : CC2CH5.CHR ()  
 Operator : PEARCE

H50

-25.600mV

256.000mV



**Component****Number Retention****Area**

Dichlorodifluoromethane	1	3.016	335.56
Chloromethane	243	3.183	229.79
Vinyl Chloride	5	3.650	334.39
Trichlorodifluoromethane	6	4.483	221.56
1,1-Dichloroethene	7	5.166	149.16
Methylene Chloride	8	5.700	1723.28
trans-1,2-Dichloroethene	9	6.033	42.83
trans-1,2-Dichloroethane	9	6.300	353.78
trans-1,2-Dichloroethene	9	6.616	53.29 M
1,1-Dichloroethane	10	7.166	1874.73 M
1,1,1-Trichloroethane	12	9.883	1943.51 M
Carbon tetrachloride	13	10.216	3149.98 M
1,2-Dichloroethane	14	10.833	2027.33 M
Trichloroethene	15	12.283	250.93 M
1,2-Dichloropropane	16	12.800	1944.48 M
Dibromomethane	17	13.033	751.49 M
Bromodichloromethane	18	13.450	1232.40 M
cis-1,3-Dichloropropene	19	14.516	1215.72 M
trans-1,3-Dichloropropene	20	15.883	305.21 M
1,1,2-Trichloroethane	21	16.250	1021.14 M
Tetrachloroethene (PCE)	22	16.563	60.19 M
Dibromo-chloromethane	23	17.150	472.05 M
1,2-Dichloroethane	24	17.383	550.66 M
Chlorobenzene	25	18.600	111.33 M
1,1,1,2-TCA	26	18.933	902.48 M
Bromoform	39	20.733	132.06 M
1,3-Dichlorobenzene	31	22.633	21.91 M
1,4-Dichlorobenzene	32	23.183	49.10 M
1,2-Dichlorobenzene	33	24.166	58.69 M

**SOIL GAS LABORATORY QUALITY CONTROL CHECK SAMPLES**

DATE PERFORMED:

6/30/95

INJECTION TIME:

0830

6/12/95

17:10

SUPPLY SOURCE:

CHEM SERVICE

=

COMPOUND	TRUE CONC	DET CONC	%DIFF	TRUE CONC	DET CONC	%DIFF
BENZENE	10	10.29	-1	10	10.57	6
TOLUENE	"	9.39	3	"	10.3	3
ETHYL BENZENE	"	9.84	2	"	10.79	8
VINYL CHLORIDE	10	10.55	5	"	10.35	4
11 DCE	10	9.08	9	"	9.26	3
1,2ETHYLENE CHLORIDE	"	9.39	1	"	10.30	3
CHLOROFORM	"	10.26	3	"	9.5	5
111 TCA	"	10.83	8	"	10.61	6
CHLORON TET	"	10.82	8	"	9.5	5
TCE	"	9.46	5	"	10.54	5
PCE	"	9.09	-1	"	10.57	3

DATE PERFORMED:

INJECTION TIME:

SUPPLY SOURCE:

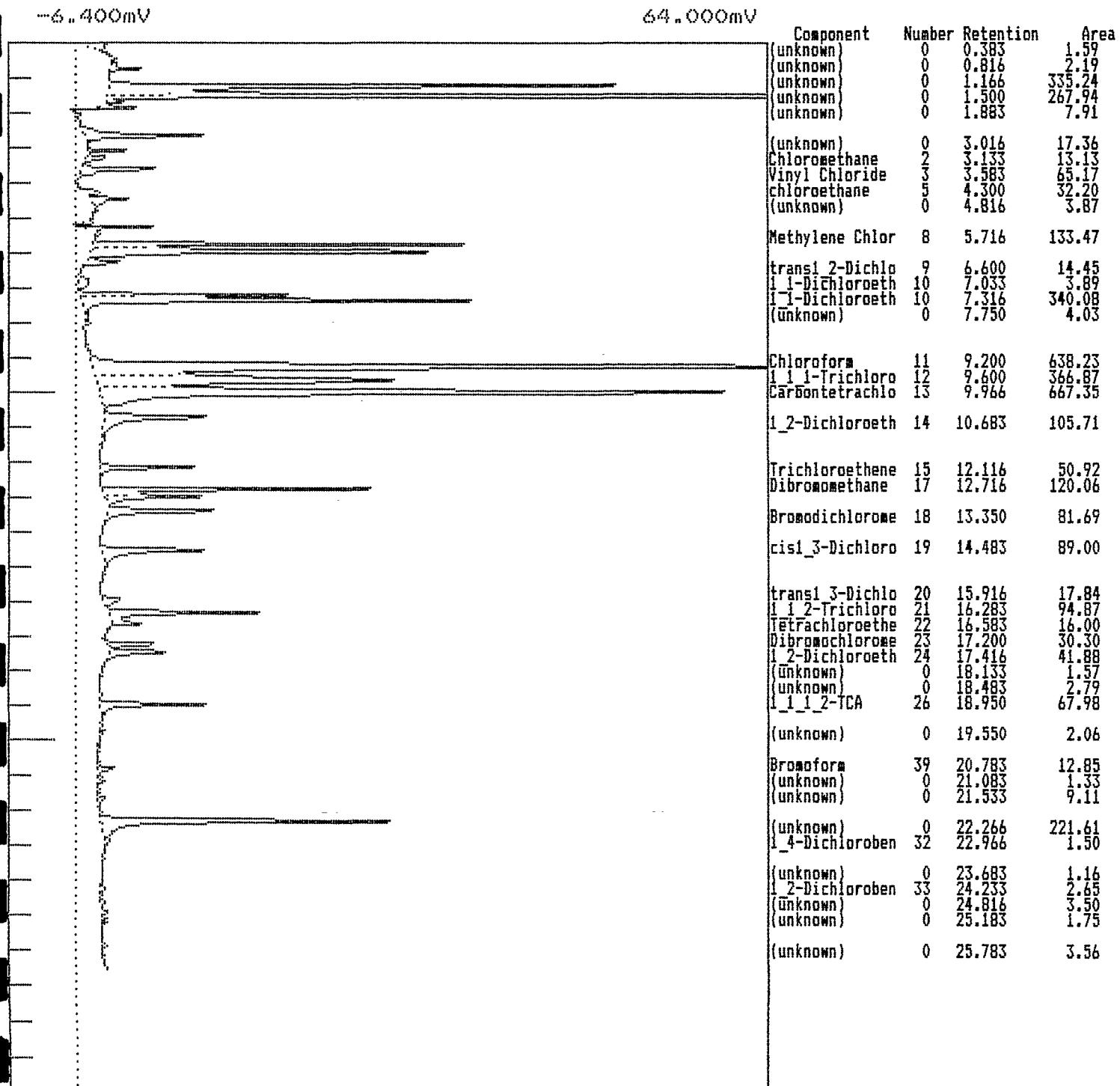
                  

COMPOUND	TRUE CONC	DET CONC	%DIFF	TRUE CONC	DET CONC	%DIFF
EZANANE	10	10.81	+8			
TOLUENE	"	9.6	-4			
1,2-DIISOPROPYNE	"	10.73	3			
VINYL CHLORIDE	"	9.95	-1			
11 DCE	"	9.72	9			
1,2ETHYLENE CHLORIDE	"	9.65	3			
CHLOROFORM	"	9.87	1			
111 TCA	"	8.09	10			
CHLORON TET	"	9.77	3			
TCE	"	10.08	10			
PCE	"	11.1	11			

Lab name : IEES  
Client : CROWN CITY  
Column : J&W DB-624 75 m  
Carrier : HYDROGEN  
Temp. prog : SOL10.TEM  
Components : C2815H.CPT  
Integration : Peak sens=95.0 Base sens=30.0 Min area= 1.00 Dilution= 1.00  
0 Tangents=off  
Data file : CC2CH3.CHR ()  
Operator : PEARCE

Temperature program:  
Init temp Hold Ramp Final temp

Events:  
Time Event



Component	Number	Retention	Area
(unknown)	0	0.000	20.01
(unknown)	0	0.383	1.59
(unknown)	0	0.600	5.95
(unknown)	0	0.733	8.63
(unknown)	0	0.816	2.19
(unknown)	0	1.166	335.24
(unknown)	0	1.500	267.94
(unknown)	0	1.833	8.61
(unknown)	0	1.883	7.91
(unknown)	0	2.683	96.26
(unknown)	0	3.016	17.36
Chloromethane		3.133	13.13
Vinyl Chloride		3.583	65.17
chloroethane	5	4.300	32.20
Trichlorodifluoromethane	6	4.416	31.10
(unknown)	0	4.816	3.87
1,1-Dichloroethene	7	5.366	2.25
Methylene Chloride	8	5.716	133.47
trans-2-Dichloroethene	9	6.250	21.60
trans-2-Dichloroethene	9	6.600	14.45
1,1-Dichloroethane	10	7.033	3.89
1,1-Dichloroethane	10	7.316	340.08
(unknown)	0	7.750	4.03
Chloroform	11	9.200	638.23
1,1,1-Trichloroethane	12	9.600	366.97
Carbon tetrachloride	13	9.966	667.35
1,2-Dichloroethane	14	10.483	105.71
Trichloroethene	15	12.116	50.92
Dibromomethane	17	12.716	120.06
Bromodichloromethane	18	13.350	81.69
cis-1,3-Dichloropropane	19	14.483	89.00
trans-1,3-Dichloropropene	20	15.916	17.84
1,1,2-Trichloroethane	21	16.283	94.87
Tetrachloroethene (PCE)	22	16.583	16.00
Dibromochloromethane	23	17.200	30.30
1,2-Dichloroethane	24	17.416	41.88
(unknown)	0	18.133	1.57
(unknown)	0	18.483	2.79
1,1,1,2-TCA	26	18.950	67.98
(Unknown)	0	19.550	2.06
Bromoform	39	20.783	12.85
(unknown)	0	21.083	1.03
(unknown)	0	21.533	9.11
(unknown)	0	22.266	221.61
1,4-Dichlorobenzene	32	22.966	1.50
(unknown)	0	23.483	1.16
1,2-Dichlorobenzene	33	24.233	2.65
(unknown)	0	24.500	3.01
(unknown)	0	24.816	3.50
(unknown)	0	25.050	1.11
(unknown)	0	25.183	1.75
(unknown)	0	25.783	3.56

Lab name : IEES  
Client : CROWN CITY  
Temp. prog : SOL10.TEM  
Components : C2817PH.CPT  
Integration : Peak sens=95.0 Base sens=30.0 Min area= 10.00 Dilution= 1.00  
0 Tangents=off  
Data file : CC2CPH8.CHR ()  
Operator : PEARCE

Temperature program:  
Init temp Hold Ramp Final temp

Events:  
Time Event

-12.800mV

128.000mV

Component	Number	Retention	Area	External	Units
(unknown)	0	3.183	23.53	N/A	
Vinyl Chloride	3	3.633	73.45	N/A	ug/L
(unknown)	0	5.133	18.21	N/A	
(unknown)	0	5.350	602.15	N/A	
(unknown)	0	5.950	71.70	N/A	
trans1_2Dichlor	9	6.433	556.73	N/A	ug/L
(unknown)	0	9.050	60.60	N/A	
(unknown)	0	9.366	15.41	N/A	
Benzene	51	10.816	495.71	9.97	ug/L
(unknown)	0	11.400	15.98	N/A	
Trichloroethene	15	12.300	347.89	N/A	ug/L
(unknown)	0	13.516	10.49	N/A	
(unknown)	0	14.566	92.04	N/A	
Toluene	52	15.333	463.49	10.15	ug/L
trans1,3-Dichlor	20	15.933	63.87	N/A	ug/L
Tetrachloroethe	22	16.583	191.51	N/A	ug/L
Ethylbenzene	55	19.033	362.99	9.43	ug/L
M-P Xylene	53	19.366	435.84	8.92	ug/L
O-Xylene	54	20.383	330.65	8.37	ug/L
(unknown)	0	21.550	22.46	N/A	
(unknown)	0	22.850	61.91	N/A	
(unknown)	0	23.516	16.90	N/A	
(unknown)	0	24.283	15.45	N/A	

Component	Number	Retention	Area	External	Units
(unknown)	0	3.183	23.53	N/A	
Vinyl Chloride	3	3.633	73.45	N/A	ug/L
(unknown)	0	5.133	18.21	N/A	
(unknown)	0	5.350	602.15	N/A	
(unknown)	0	5.750	91.97	N/A	
(unknown)	0	5.950	71.70	N/A	
trans1,2Dichloroethene	9	6.433	556.73	N/A	ug/L
(unknown)	0	9.050	60.60	N/A	
(unknown)	0	9.366	15.41	N/A	
Benzene	51	10.816	495.71	9.97	ug/L
(unknown)	0	11.400	15.98	N/A	
Trichloroethene	15	12.300	347.89	N/A	ug/L
(unknown)	0	13.516	10.49	N/A	
(unknown)	0	14.566	92.04	N/A	
Toluene	52	15.333	463.49	10.15	ug/L
trans1,3-Dichloropropene	20	15.933	63.87	N/A	ug/L
Tetrachloroethene	23	16.583	191.51	N/A	ug/L
Chlorobenzene	25	18.683	578.22	8.06	ug/L
Ethylbenzene	55	19.033	362.99	8.43	ug/L
M-E Xylene	53	19.366	435.84	8.92	ug/L
O-Xylene	54	20.383	330.65	8.37	ug/L
(unknown)	0	21.550	22.46	N/A	
(unknown)	0	22.850	61.91	N/A	
(unknown)	0	23.516	16.90	N/A	
(unknown)	0	24.066	11.47	N/A	
1,3-Dichlorobenzene	31	24.283	15.45	N/A	
		24.516	371.83	6.70	ug/L

Lab name : IEES  
Client : CROWN CITY  
Temp. prog : SOL10.TEM  
Components : 817PH.CPT

Integration : Peak sens=95.0 Base sens=30.0 Min area= 10.00 Dilution= 1.00  
0 Tangents=off  
Data file : cc2cpn3.CHR ()  
Operator : PEARCE

Temperature program:  
Init temp Hold Ramp Final temp

Events:  
Time Event

-12.800mV

128.000mV

Component Number Retention Area

(unknown) 0 3.133 13.04  
Vinyl Chloride 3 3.566 106.56

(unknown) 0 5.200 1030.62  
(unknown) 0 5.533 121.02

(unknown) 0 6.183 846.95

(unknown) 0 8.633 32.79  
(unknown) 0 8.983 10.45

Benzene 51 10.483 517.47  
(unknown) 0 11.033 12.83

Trichloroethene 15 11.950 441.99

cis1,3-Dichlorop 19 14.283 97.67

Toluene 52 15.083 541.22

trans1,3-Dichlor 20 15.700 59.32

Tetrachloroethe 22 16.366 290.13

Chlorobenzene 25 18.533 617.39  
Ethylbenzene 55 18.816 321.97

O-Xylene 54 20.266 302.68

(unknown) 0 21.550 45.36

(unknown) 0 23.000 12.36

(unknown) 0 23.650 17.62

(unknown) 0 24.233 12.75

1,3-Dichloroben 31 24.700 270.07

1,4-Dichloroben 32 24.966 244.73

1,2-Dichloroben 33 26.000 206.33

(unknown) 0 26.916 33.16

(unknown) 0 27.816 27.82

(unknown) 0 28.666 30.56

(unknown) 0 29.483 25.59

Component	Number	Retention	Area
(unknown)	0	3.133	13.04
Vinyl Chloride	3	3.566	106.56
1,1-Dichloroethene	7	4.983	384.21
(unknown)	0	5.200	1030.62
(unknown)	0	5.533	121.02
(unknown)	0	6.183	846.95
(unknown)	0	8.633	32.79
(unknown)	0	8.983	10.45
Benzene	51	10.483	517.47
(unknown)	0	11.033	12.83
Trichloroethene	15	11.950	441.99
cis1,3-Dichloropropene	19	14.283	97.67
Toluene	52	15.083	541.22
trans1,3-Dichloropropene	20	15.700	59.32
Tetrachloroethene	22	16.366	290.13
Chlorobenzene	25	18.533	617.39
Ethylbenzene	34	18.916	321.97
O-Xylene	0	20.266	302.68
(unknown)	0	21.550	45.36
(unknown)	0	23.000	12.36
(unknown)	0	23.850	17.62
(unknown)	0	24.033	10.10
(unknown)	0	24.233	12.75
1,3-Dichlorobenzene	31	24.700	270.07
1,4-Dichlorobenzene	32	24.966	244.73
1,2-Dichlorobenzene	35	26.000	206.33
(unknown)	0	26.916	33.16
(unknown)	0	27.550	14.49
(unknown)	0	27.816	27.82
(unknown)	0	28.666	30.56
(unknown)	0	29.463	25.59
(unknown)	0	29.983	15.24

32

6714.46

Lab name : IEES  
 Client : CROWN CITY  
 Column : J&W DB-624 75 m  
 Carrier : HYDROGEN  
 Temp. prog : SOL10.TEM  
 Components : C2815H.CPT  
 Integration : Peak sens=95.0 Base sens=30.0 Min area= 1.00 Dilution= 1.00  
 0 Tangents=off  
 Data file : CC2CH6.CHR ()  
 Operator : PEARCE

Temperature program:  
 Init temp Hold Ramp Final temp

Events:  
 Time Event

-6.400mV

64.000mV

Component	Number	Retention	Area
(unknown)	0	0.383	1.59
(unknown)	0	0.816	1.69
(unknown)	0	1.200	351.97
(unknown)	0	1.616	2.66
(unknown)	0	1.783	1.07
(unknown)	0	3.016	60.74
Chloromethane	2	3.216	58.80
Vinyl Chloride	3	3.700	69.74
(unknown)	0	4.200	111.64
Trichlorodifluo	6	4.500	103.48
1-Dichloroeth	7	5.183	29.46
(unknown)	0	5.366	2.25
Methylene Chlor	8	5.750	353.36
transl_2-Dichlo	9	6.550	78.54
1_1-Dichloroeth	10	7.250	364.59
(unknown)	0	8.316	7.14
Chloroform	11	9.250	681.71
1_1_1-Trichloro	12	9.600	349.97
Carbontetrachlo	13	9.766	632.54
1_2-Dichloroeth	14	10.616	278.45
(unknown)	0	11.400	6.39
Trichloroethene	15	12.083	46.20
1_2-Dichloropro	16	12.616	372.97
Dibromomethane	17	12.933	39.03
Bromodichlorome	18	13.350	81.69
cis1_3-Dichloro	19	14.483	89.00
transl_3-Dichlo	20	15.916	17.84
1_1_2-Trichloro	21	16.283	94.51
Tetrachloroethe	22	16.600	15.86
Dibromochlorome	23	17.200	30.30
1_2-Dichloroeth	24	17.416	41.88
(unknown)	0	18.133	1.57
(unknown)	0	18.483	2.79
1_1_1_2-TCA	26	18.750	67.98
(unknown)	0	19.550	2.06
Bromoform	37	20.783	12.85
(unknown)	0	21.083	1.33
(unknown)	0	21.533	7.87
(unknown)	0	22.316	249.15
(unknown)	0	24.716	11.76
(unknown)	0	25.666	12.32
(unknown)	0	26.083	1.19

Component	Number	Retention	Area
(unknown)	0	0.000	20.01
(unknown)	0	0.383	1.59
(unknown)	0	0.600	5.95
(unknown)	0	0.733	8.63
(unknown)	0	0.816	1.69
(unknown)	0	1.200	351.97
(unknown)	0	1.616	2.66
(unknown)	0	1.783	1.87
(unknown)	0	1.983	1.07
(unknown)	0	3.016	60.74
Chloromethane	3	3.216	58.80
Vinyl Chloride	3	3.700	69.94
(unknown)	0	4.200	111.64
Trichlorodifluoromethane	6	4.500	103.48
1,1-Dichloroethene	7	5.183	29.46
(Unknown)	0	5.366	2.25
Methylene Chloride	8	5.750	353.36
trans1,2-Dichloroethene	9	6.550	78.54
1,1-Dichloroethane	10	7.250	364.59
(unknown)	0	7.950	1.47
(unknown)	0	8.316	7.14
Chloroform	11	9.250	681.71
1,1,1-Trichloroethane	12	9.600	349.97
Carbon tetrachloride	13	9.966	632.54
1,2-Dichloroethane	14	10.616	278.45
(Unknown)	0	11.400	6.39
Trichloroethene	15	12.083	46.20
1,2-Dichloropropane	16	12.616	372.97
Dibromomethane	17	12.933	39.03
Bromodichloromethane	18	13.350	81.69
cis1,3-Dichloropropane	19	14.483	89.00
trans1,3-Dichloropropene	20	15.916	17.84
1,1,2-Trichloroethane	21	16.283	94.51
Tetrachloroethene (PCE)	22	16.600	15.86
Dibromochloromethane	23	17.200	30.30
1,2-Dichloroethane	24	17.416	41.88
(Unknown)	0	18.133	1.57
(Unknown)	0	18.483	2.79
1,1,1,2-TCA	26	18.950	67.98
(Unknown)	0	19.550	2.06
Bromoform	39	20.783	12.85
(Unknown)	0	21.083	1.33
(Unknown)	0	21.533	7.87
(Unknown)	0	22.316	249.15
(Unknown)	0	24.433	9.31
(Unknown)	0	24.716	11.76
(Unknown)	0	25.533	1.37
(Unknown)	0	25.666	12.32
(Unknown)	0	26.083	1.19